

DOCUMENTING THE IMPLEMENTATION AND EFFECTS OF  
POSITIVE BEHAVIOR SUPPORT IN AN ALTERNATIVE  
EDUCATIONAL SETTING

by

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## ABSTRACT

Positive behavior support (PBS) is a preventative and proactive system of managing behavior that is being used in the United States and other countries. Positive behavior support has been successfully implemented in typical school settings for students with and without disabilities. However, research documenting the implementation and effects of PBS in alternative settings is scarce. The purposes of this study were to a) provide detailed documentation of a model for implementing PBS in an alternative educational setting that could be used as a model to implement PBS in similar settings, b) to assess student outcomes following PBS implementation, and c) to obtain social validity data related to teacher and staff attitudes about the acceptability and applicability of PBS in alternative educational settings.

For Kai, Malachi, and Elijah, who make every day the best day of my life.

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## CHAPTER 1

### INTRODUCTION

When students have academic skill deficits, educators teach the necessary skills. When students have behavioral skill deficits, too frequently educators punish instead of teach (Smith, 1995). Punishment alone does not teach students appropriate social behaviors (Mayer, 1995). Problem behavior indicates a skill deficit, requiring direct instruction, modeling, and reinforcement of appropriate social behaviors (Barton-Arwood, Morrow, Lane, & Jolivette, 2005). When problem behavior is not effectively addressed, it impedes teaching and disrupts learning for all students (Irvin, Tobin, Sprague, Sugai, & Vincent, 2004). Students are entitled to an educational milieu that is free of psychological stress and violence, where students can flourish academically and socially. The intensity of problem behavior in schools is exacerbated when students live in dysfunctional home environments (Lewis & Sugai, 1999; Lewis, Sugai, & Colvin, 1998). While educators are often unable to impact students' home environments, they can play a pivotal role in fostering the development of positive social behaviors necessary for students to lead meaningful and satisfying lives.

The prevalence of antisocial behaviors in schools mirrors greater societal trends and manifests in a number of ways. Consider the following from the National Center for

Educational Statistics *Indicators of School Crime and Safety* (2007):

- In 2005, approximately 1.5 million students between the ages of 12-18 were victims of nonfatal crimes at school, including 868,100 thefts and 628,200 violent crimes.
- During the 2005-2006 school year, 86% of public schools reported at least one violent crime, theft, or other crime that occurred at the school.
- In 2005, 8% of students in grades 9-12 reported being threatened or injured with a weapon in the previous 12 months.
- Twenty-five percent of students reported that other students had offered, sold, or given them illicit drugs on school property in the past 12 months.
- In 2005, 28% of students ages 12-18 reported having been bullied at school in the previous 6 months. Of this 28%, 53% said the bullying occurred once or twice during the past 6-month period, 25% said they had experienced bullying once or twice per month, 11% reported being bullied once or twice per week, and 8% said they had been bullied almost daily.

The occurrence of problem behavior in schools has inspired legislative responses such as The Gun-Free Schools Act of 1994 and The Safe and Drug-Free Schools and Communities Act of 2002. As a result of these initiatives, schools throughout our nation have adopted policies of zero-tolerance and incorporated disciplinary strategies that rely upon negative consequences (e.g., office discipline referrals, security guards, metal detectors, suspension, and expulsion) to correct problem behavior (Van Acker, 2007). Unfortunately, these strategies are marginally effective at best and tend to contribute to

hostile school climates. The American Psychological Association conducted an extensive examination of literature relating to zero-tolerance policies and student outcomes, and found that strict adherence to zero-tolerance policies are associated with high rates of suspensions and expulsions, with little evidence of increased school safety (American Psychological Association, 2008). Contrary to the aims of zero-tolerance policies, these policies impede the development of positive relations between educators and students, and have exasperated the reliance on the juvenile justice system to respond to student who exhibit behavior problems in the school setting.

This is illustrated by a number of studies which conclude that discipline systems that overemphasize punishment and do not have positive supports in place are associated with higher rates of aggression, vandalism, truancy, and school drop-out (Lipsey, 1991; Mayer, 1995; Mayer & Sulzer-Azaroff, 1991; Safran, 2006). Upon entering elementary school, many students lack prerequisite social skills due to ineffective behavior management in their home environments and are poorly equipped to behave appropriately in schools (Lewis & Sugai, 1999). To combat the ill effects of chronic antisocial behavior among youth, the educational system may offer the last opportunity for youth to gain the academic and social skills required to become contributing members of society.

### The Education System in the United States

In the early history of the education system in the United States, the cardinal duty of schools was to provide students with sound instruction in core academic subjects while teaching students to respect authority and upon completion of schooling, be assimilated

into the workforce (Gable, Bullock, & Evans, 2006). When there was a need to manage behavior, teachers relied upon harsh consequences such as corporal punishment, or made students feel shame or humiliation (Gable, et al., 2006). To some extent, the proclivity of responding to student's problem behavior with harsh consequences continues to prevail within the education system (Gable, et al., 2006; Lewis & Sugai, 1999).

An alternate approach to responding to students' behavioral needs is known as positive behavior support (PBS). Positive behavior support is a model that utilizes evidence-based practices to teach students the skills they need to maintain appropriate behavior in schools. Benefits associated with the implementation of PBS include dramatic reductions in office discipline referrals (ODRs), more time spent actively engaged in academic instruction, more positive impressions of school, decreased substance abuse, and improved academic performance for students, including those with disabilities (Lewis & Sugai, 1999; McCurdy, Mannella, & Eldridge, 2003; Nelson, Sprague, Jolivette, Smith, & Tobin, 2009; Ross & Horner, 2007).

### Overview of Positive Behavior Support

Recent mandates including the reauthorization of the Individuals with Disabilities Education Act (Public Law 105-17, 1997) support positive, assessment-based approaches when addressing the problem behavior of students. The 1997 amendments to the Individuals with Disabilities Education Act (IDEA) encouraged the use of positive behavioral interventions, strategies, and supports to address the needs of students whose behavior impedes their learning or the learning of others. Specifically, IDEA 1997 requires that schools provide PBS not just for students receiving special education

services, but also for students whose behavior problems put them at risk of necessitating special education services (Safran & Oswald, 2003).

Positive behavior support is designed to be preventative and proactive by (a) incorporating collaborative, data based decision-making strategies, (b) clearly identifying a small number of school-wide behavioral expectations, (c) teaching the behavioral expectations to all students, (d) rewarding and recognizing the performance of the behavioral expectations, and (e) correcting rather than ignoring or rewarding problem behavior (Horner & Sugai, 2000; Lewis & Sugai, 1999; Nelson, Sugai, & Smith, in 2005).

Historically, applied behavior analysis has been the dominant methodology for managing problem behavior within the field of special education (Sailor, Stowe, Turnbull III, & Kleinham-Tranmill, 2007). PBS is an approach to intervention that integrates the features of applied behavior analysis and functional behavioral assessment to teach students positive social behaviors (Horner & Sugai, 2000). In response to efforts at the federal level to improve the atmosphere in schools and reduce school violence, a shift is occurring among schools to not only target high-frequency (e.g., classroom disruptions) or high-intensity problem behavior (e.g., aggression directed at teachers or peers) but to also target prevention and intervention for less serious behavior problems. Positive behavior support incorporates a tiered intervention model, matching the intensity of interventions to the intensity of students' needs. The three-tiered model of PBS originated from a public health model (Horner, Todd, Lewis-Palmer, Irvin, Sugai, & Boland, 2004; National Research Council and Institute of Medicine, 1999). Adapting this model has allowed schools to allocate resources for intensive, individualized interventions when

necessary, while incorporating lower levels of support for students with less intensive needs. When problem behavior is addressed quickly, the majority of minor behavior infractions are prevented from escalating to a more chronic level. Positive behavior support is based on two key principles: a) students are taught alternative, positive behaviors to develop skills necessary to succeed in school, home, and community settings, and b) a continuum of supports are provided to accommodate the varying need of all students (Hawken, 2006; Sailor, et al., 2007; Scott, Nelson, Liaupsin, Jolivette, Christle, & Riney, 2002). The continuum of support includes primary or universal prevention for all students. The goal of primary level prevention is to promote positive student behavior and decrease the likelihood of infractions. Even with effective preventative supports in place, approximately 10-15% of students fail to respond to this level of support and remain at risk for social and academic problems. For students with additional needs, secondary or targeted supports are put in place. Tertiary or individualized supports are implemented for approximately 5% of students who demonstrate significant academic and social needs, requiring intensive, individualized interventions.

### *Three Levels of Positive Behavior Support*

In PBS, primary level prevention involves the entire school population and impacts all school settings. The purpose of primary prevention is to reduce the number of students who would require more intensive support by adapting the school environment in a way that encourages positive behaviors (Scott, et al., 2002). Critical features of primary level prevention include establishing three to five school-wide behavioral



expectations that are explicitly taught, practiced, and reinforced with all students. Students should be rewarded for meeting these behavioral expectations. A second element of prevention is employing a clear and consistent continuum of consequences when students fail to respond to the school-wide expectations. All problem behavior patterns can be monitored and documented in a variety of ways (e.g., office discipline referrals), and this information should be used for on-going decision making about the effectiveness of school-wide interventions. Primary level prevention is most effective if school administrators and staff collaborate to support the PBS model and maintain a commitment to consistently implement primary level prevention services with all students in all school environments (Sugai & Horner, 2006). In addition, school districts should provide regular support and training on implementing PBS for all school personnel.

Secondary level interventions are put in place to efficiently respond to groups of students with similar behavioral needs, who have failed to meet behavioral expectations after primary level prevention is in place. Secondary level interventions are consistent with school-wide expectations but more intensive (Hawken, Adolphson, MacLeod, & Schumann, 2009). This level of support often involves providing students at risk with more frequent teaching of school rules and increased opportunities to practice and be rewarded for meeting behavioral expectations (OSEP, 2005). These interventions should be quickly accessible to students, and all school personnel should be trained on how and when to refer students for additional support. Consistent with primary level interventions, secondary level interventions also involve continuous progress monitoring and data-based decision making. These interventions are flexible and should be adapted if students

are not demonstrating progress.

Tertiary level interventions are put in place when students demonstrate chronic problem behavior regardless of primary and secondary supports (OSEP, 2007). Generally, approximately 5% of the student population requires tertiary level support. At this level, students receive individualized behavior support plans based on the functional assessment of the problem behavior. Tertiary interventions involve directly teaching students how to use new skills to replace undesirable behavior. These interventions also focus on adapting the antecedent environment to lessen the likelihood of problem behaviors from occurring, as well as consistent procedures for responding to problem behaviors when they do occur (McIntosh, Chard, Boland, & Horner, 2006). At this level of support, progress is monitored and when necessary interventions are modified if the intervention fails to improve the behavior problems.

#### *Populations Supported with Positive Behavior Support*

To date, PBS has been successfully implemented in typical school settings for students with and without disabilities in both elementary and secondary settings (Horner, Sugai, Todd, & Lewis-Palmer, 2005; Houchins, Jolivet, Wessendorf, McGlyn, & Nelson, 2005; McCurdy, Mannella, & Eldridge, 2003). At the primary level, PBS has resulted in decreased ODRs and in and out of school suspensions and an increase in the time students are actively engaged in instruction (McCurdy, et al., 2003; Scott, 2001). For example, Lassen, Steele, and Sailor (2006) documented the reductions of ODRs and suspensions during a 3-year period of school-wide PBS implementation at an urban middle school. To assess the fidelity of PBS implementation, the School-wide Evaluation

Tool (SET: Horner, et al., 2004) was administered prior to implementation and at the end of year 3. In year 1 of the study, researchers offered a professional development activity for school staff in which they provided an overview of PBS, and also provided an outline of the school's current disciplinary policies in comparison to a PBS model. Also during the 1<sup>st</sup> year, a training session was held for teachers and administrators in which the following six school-wide rules were developed: a) Be Responsible, b) Be Respectful, c) Be Ready to Learn, d) Be Cooperative, e) Be Safe, and f) Be Honest. Another goal of this training was to operationally define each of the rules and develop procedures for teaching the school-wide rules to all students. The intervention was implemented at the start of year 2. Teachers used role-play and direct instruction to teach the rules to students, and posters stating school rules were displayed in each classroom and other common areas within the school. A reward system was developed to "catch" students demonstrating behavioral expectations. Students who were seen engaging in appropriate behaviors were given a ticket to be entered in weekly drawings to receive prizes (e.g., books, key chains, pens). Researchers worked with school staff during quarterly trainings to maintain the school-wide discipline system. Results of this case study indicated that scores on the School-wide Evaluation Tool (documenting percentages of critical elements of PBS in place) increased from 24.97% during baseline conditions in year 1 to 69.4% during year 3. Data indicated significant reductions in ODRs and suspensions. Horner and Sugai (2003) have estimated the average instructional time lost per ODR to be 45 minutes. Based on these estimates, the middle school recovered approximately 659 hours of instructional time.

Another example reported by Taylor-Greene and Kartub (2000) involved a middle

school in Oregon. In response to excessive ODRs, specifically numbers exceeding 5000 in the 1993-1994 school year, the staff introduced a school-wide program of positive behavior supports and interventions called the High Five Program. In the 1994-1995 school year, students in this middle school were taught specific student expectations within the first 2 days of school. Over the next 5 years, the number of ODRs steadily declined (Taylor-Greene & Kartub, 2000). In the 1<sup>st</sup> year of the High Five Program, the number of ODRs decreased by 47% and 5 years after implementation, ODRs were reduced by 68%. In addition to substantial reductions in the number of ODRs, Taylor-Greene and Kartub (2000) reported that the school climate transformed from one that was negative and focused on reacting to problem behaviors with punitive measures to an atmosphere that was positive and focused on prevention through a positive team approach. In order to maintain the benefits of the High Five Program, Fern Ridge Middle School had on-going administrative support, regularly set improvement goals, used a team-based approach to providing behavioral support, provided on-going reinforcement for students when school-wide expectations were followed, and used formative evaluation to determine the success of the program. The High Five Program is one example of continuous benefits of long-term PBS implementation.

At the secondary level of intervention, PBS has effectively reduced in-class disruptions, incomplete assignments, and office discipline referrals (Hawken, MacLeod, & Rawlings, 2007; Lohrmann & Talerico, 2004). For example, Hawken, et al., (2007) conducted a study to determine the effects of a secondary level intervention called the *Behavior Education Program* (BEP) on reducing ODRs. The BEP is a check in, check out program that affords students at risk more frequent feedback on their behavior.

Students in this program have daily opportunities to receive reinforcement for meeting behavioral expectations. This study used a multiple baseline across groups design, including four groups of three students each. During baseline conditions, primary level prevention services were in place, and the 12 students averaged 3.59 ODRs per month each. Reductions in ODRs were documented for all four groups. Specifically, during the intervention phase the average ODRs were reduced by 51% for group 1, 46% for group 2, 36% for group 3, and 25% for group 4.

At the tertiary or individual level, PBS has resulted in decreased problem behavior for students when the interventions have been matched with the function of the problem behavior (Newcomer & Lewis, 2004). Many published examples of the success of PBS are available at the elementary level (Lewis, et al., 1998; Nelson, Martella, & Marchand-Martella, 2002) at a middle school level (Lassen, Steele, & Sailor, 2006; Luiselli, Putnam, & Sunderland, 2002) and at the high school level (Bohanon-Edmonson, Flannery, Eber, & Sugai, 2004).

Positive benefits of PBS have also been documented at the district level. In a city in the Pacific Northwest, seven elementary schools from one district were studied for 2 years after the implementation of a comprehensive school-wide program to respond to problem behavior (Nelson, et al., 2002). The remaining 28 schools in the district were used to provide a basis for comparison. The program included four main elements: a) school-wide organizational practices (i.e., ecological arrangements of the schools' common areas, behavioral expectations, active supervision, and effective disciplinary policies and procedures), b) a school-wide classroom management intervention to ensure consistent teacher responses to problem behaviors, c) individualized, function-based

intervention plans, and d) a leadership team to monitor the program's progress, make necessary modifications, and evaluate the program's effectiveness (Nelson, et al., 2002). The evaluation of outcomes was based on pre and post measures of behavioral and academic performance. The seven schools that participated in the program observed reductions in ODRs, suspensions, and emergency student removals, while the 28 comparison schools demonstrated increases in each of these areas. In addition to marked reductions in problem behavior, the students in schools that participated in this program showed significant improvements in reading, language arts, spelling, science, and social studies.

While antisocial behavior is a concern in schools throughout the nation as a whole (Lewis, et al., 1998; Lewis & Sugai, 1999; Walker & Horner, 1996), schools that are located in communities with elevated risk factors and have higher rates of poverty are more heavily impacted. McCurdy, et al., (2003) conducted a case study of a large elementary school located in an urban area in the northeastern United States. In response to concerns about escalating problem behavior from school staff, the principal requested assistance from a local behavioral-health care provider. In order to address the levels of disruptive behaviors and prevent further intensification of antisocial behaviors, a model of school-wide PBS was implemented. Initially, a leadership team was selected. The team met on a biweekly basis to plan and implement the system of PBS. The project took place over the course of 2 academic years. In year 1, primary level prevention services were put in place to teach students prosocial behaviors. Primary level prevention included establishing behavioral expectations and common area routines, developing a motivation system, establishing a hierarchy of correction procedures, and structuring the playground.

During the 2<sup>nd</sup> year of the project, secondary and tertiary supports were implemented. Additionally, classroom management training was provided to all teaching staff during both years of the project. In this study, outcome measures included the number of ODRs and a staff satisfaction questionnaire. In the year prior to implementing school-wide PBS, the number of ODRs was .63 per student. In the 1<sup>st</sup> year of implementation, that number declined to .49, and continued to decrease to .34 ODRs per student in the 2<sup>nd</sup> year of PBS implementation. Mean scores on a staff satisfaction questionnaire increased after the 1<sup>st</sup> year of implementation, indicating that school staff felt that school-wide PBS was associated with positive outcomes. The authors also noted that the school observed a decline in student fighting (55% reduction in ODRs for fighting during the first 2 years of implementation), and significant improvement on the playground, formerly one of the school's more problematic areas.

The success of PBS in typical school placements has been well documented in the current literature, and provides a strong rationale for the extension of PBS to alternative school placements. While many positive outcomes are associated with the incorporation of systems of PBS, thousands of students with serious social and academic difficulties are educated in alternative educational settings due to severe problem behavior or involvement with the juvenile justice system. Unfortunately, the implementation of PBS has not been extensively implemented or studied to date in alternative settings. This means that many students with the most critical needs are the least likely to be exposed to and benefit from PBS.

### Alternative Educational Settings: Current Practices and Attitudes

According to the National Center for Educational Statistics, during the academic year 2000-2001, over 600,000 students nationwide were served in approximately 10,900 alternative school settings (Bullock, 2006; Foley & Pang, 2006; Gable, et al., 2006). An estimated 12-19% of students served in alternative school settings have disabilities. In juvenile correction facilities, these estimates rise to over 30% of the population, with approximately 42% of those students classified as emotionally disturbed (ED). While PBS has been implemented in approximately 6000 schools nationwide, only 4% of those schools include alternative education and juvenile justice programs (Nelson, et al., 2009).

As the number of students educated in alternative educational settings has increased over the past decade, the types of alternative programs has also expanded (Gable, et al., 2006; Kleiner, Porch, & Farris, 2002). Purposes for alternative education range from programs designed to serve students who exhibit behavior problems that prevent them from receiving typical education to programs designed to enhance academic skills of students falling behind typically performing peers (Mendez, 2007). Alternative education programs encompass a broad range of philosophies and service delivery models based on the target populations of students, including those with special education needs, students at risk, students with challenging behaviors, or students with advanced educational needs (Van Acker, 2007). These programs include public schools for students at risk, charter schools, schools within juvenile detention centers, day treatment programs, and residential schools (Foley & Pang, 2006; Gable, et al., 2006). Youth attending alternative programs may have been strongly encouraged to transfer from their typical educational setting, or in other cases, students have been officially



expelled or ordered by the courts to attend alternative placements. Common characteristics of students in alternative settings include low socio-economic status, disabilities, minority status, non-native English speakers, and being victims of abuse and neglect (Flower, McDaniel, & Jolivet, 2011; Guerin & Denti, 1999). Students in alternative settings are also likely to demonstrate maladaptive social behaviors, have poor self-esteem, and have poor literacy and other academic skills (Nelson, et al., 2009). One of the first documented accounts of achievement levels for incarcerated youth was funded by the Office of Juvenile Justice and Delinquency (Brunner, 1977) and suggested that the average reading levels of 13-year-old incarcerated youth fell between third and fourth grade. In 2001, Foley compiled a literature review of studies conducted from 1975-1999 that assessed the academic characteristics of youth who were incarcerated. Youth between 13 and 17 years old who were incarcerated were reported to perform academically in the range of fifth through ninth grade. Most students obtained a low-average to average score on intelligence tests and were 1 year to several years below grade level. Another study of the academic levels of incarcerated youth took place in 2004 at the Adobe Mountain School, a facility for youth in the Arizona Department of Juvenile Corrections (Baltodano, Harris, & Rutherford, 2005). In this study, reading and math skills were assessed for 186 males between the ages of 13-17, using standardized and curriculum-based measures. Of the youth at Adobe Mountain, 31% were identified as being eligible for special education services with the largest special education category being emotional disturbance. The findings of this study indicated that the youth were functioning below the mean on all measures of achievement, and that ethnicity impacted achievement levels (i.e., Native Americans demonstrated the lowest levels of

achievement whereas Caucasian and “other” youth demonstrated the highest levels of achievement).

The link between antisocial behaviors and poor academic performance has been well established. Poor academic performance is a major contributing factor to school drop-out, makes postsecondary education less accessible, and restricts future employment (Flower, et al., 2011; Lane & Carter, 2006). The educational history of youth in alternative educational settings is often replete with both academic and social failure. When educators fail to promote behavioral and academic success, these youth are in danger of maintaining maladaptive behaviors through adulthood (Quinn, 2002). In addition, youth with disabilities are over-represented in alternative settings. In the past, alternative settings have removed youth from quality academic instruction and appropriate special education services (Leone, 1994; Platt, Casey, & Fassel, 2006; Quinn, Rutherford, & Leone, 2005). Alternative settings need to incorporate comprehensive curricula with a strong emphasis in both academic and social instruction. Research suggests that there is a link between problem behavior and academic achievement (Horner, Sugai, Todd, & Lewis-Palmer, 2005; Scott, et al., 2001), and reducing problem behavior will allow for more time spent actively engaged in effective instruction.

The regulations stated under IDEA 1997 Sec.300.519 require that when students with disabilities are removed from current placements for more than ten school days in the same school year, they must be provided alternate education services. While there is no consistent definition of alternative education, the term can refer to any nontraditional educational services, including mental health and juvenile justice programs. Essential

programmatic characteristics for successful alternative education have been defined as a) low student to teacher ratios and small total numbers of students, b) individualized school environments with highly structured classrooms and behavior management systems, c) specialized training for school personnel, d) positive interventions to increase appropriate behavior, e) individualized behavioral interventions based on functional behavioral assessment, f) social skills instruction, g) high-quality academic instruction, h) parental involvement, and i) transition planning for reintegration to typical school placements (Foley & Pang, 2006; Nelson et al., 2009; Tobin & Sprague, 1999; Tobin & Sprague 2000).

Historically, models of education for students removed from their typical placements have focused on security and power, and are in-congruent with the critical elements of PBS. Too often, teachers and staff hold a belief that they will be unable to positively impact students, who they feel are unmotivated to learn and abide by rules (Scott, et al., 2002). These beliefs have led to attitudes that favor punishment over education, which may result in a primary emphasis on negative consequences, and minimal resources allocated to academic and social instruction (Gable, et al., 2006). Strategies such as zero-tolerance use austere and consistent consequences (e.g., mandatory suspension or expulsion) regardless of the severity of the behavioral infraction, often leading to suspension or expulsion. Recent federal mandates such as the No Child Left Behind Act and the Individuals With Disabilities Act (2004) have been the impetus to move away from practices of suspension and expulsion for students with problem behavior, calling for alternative placements that help students achieve academic and social success. To best serve youth at risk, alternative education programs need to

shift from a reliance on ineffective punitive strategies and incorporate strategies that are geared toward prevention by teaching students skills to be successful in home, school, and community environments.

### Positive Behavior Support in Alternative Educational Settings

The expansion of PBS in alternative settings is in the initial stages, and data-based reports in the current literature are limited. Research suggests that PBS implementation across all programs in facilities (e.g., classroom, lunchroom, residential unit) will maximize their effectiveness (Nelson, et al., 2009). Currently, however, due to the diverse structures within alternative education programs, PBS implementation varies greatly from utilizing PBS only in educational components of a program to residential settings that incorporate PBS into all routines. When alternative education settings are housed with a residential component, implementing PBS solely in the educational setting only addresses approximately one third of the student's day (Houchins, et al., 2005). Regardless of questions that remain about how a PBS model should be incorporated in alternative settings, programs that have begun to incorporate systems of PBS have reported positive outcomes (Farkas, et al., 2012; Nichols & Utesch, 1998; Sidana, 2006).

While few studies have been conducted to comprehensively assess PBS in alternative settings, many alternative settings have incorporated some typical elements of PBS, such as social skills training or increased positive feedback to students, into their programs. One example is a study conducted by Nichols and Utesch (1998) of an alternative setting for students at risk in grades 6-12 who had been referred to the program by the administrators of their home schools. The objective of the study was to

determine if the specific alternative setting would have a positive impact on students' self-esteem, motivation, and academic performance. While the program emphasized developing academic skills, improving self-esteem and social skills was also a priority. The ultimate goal was to reintegrate the students in their home schools. The program was divided into two levels; level 1 focused on teaching behavioral expectations, diagnostic testing, daily opportunities to practice prosocial skills, and reading tutoring. After 6 weeks, staff assessed the readiness of students to progress to level 2, which continued to promote academic development, and curriculum was more closely linked with students' home schools to help the student succeed when reintegrated. Level 2 students also had regular opportunities to practice learned prosocial behaviors. Of the 199 middle school students who participated in this program, 108 completed the program and were able to return to their home schools. Three hundred seventy-two high school students participated in the program, and 279 returned to home schools. A 66-item Likert questionnaire was used to assess motivation and self-esteem, including subcategories such as intrinsic and extrinsic motivation, peer self-esteem, school self-esteem, home self-esteem and self-regulation. Students who completed this program reported having increased extrinsic motivation to succeed academically and socially, having increased persistence toward learning tasks, and feeling higher levels of self-esteem in home and school environments. Though this study did not specifically examine PBS in an alternative program, the program incorporated some of the critical elements of PBS such as quality academic instruction and directly teaching social skills to students.

In another study evaluating the effectiveness of an alternative education setting, an intervention was put in place to increase the ratio of positive interactions from staff

directed at the boys in a family-style residential program to determine if this would decrease the boys' behavioral problems. This study was conducted in a family-style residential placement in which troubled youth lived in a home with a married couple and an assistant family teacher. Friman and Jones (1997) selected six boys between the ages of 11-15 year old to participate in this study based on their placement being in jeopardy (i.e., engaging in one more major incident would result in being transferred to a more restrictive facility) and unacceptable ratios of positive to negative teaching interactions. The participants had been placed in residential care for various reasons, with the most common being repeated failed foster placements. The purpose of this study was to test whether or not increasing positive interactions would reduce ongoing behavior problems. Positive interactions were described as praise that addressed the specific behavior being praised, accompanied by a point award. Negative interactions were defined as interactions where a description of the negative behavior was provided, accompanied by a loss of points. During baseline conditions, family teachers were observed and the ratios of positive to negative interactions were recorded. At the start of the intervention phase, the data were summarized for family teachers and they were instructed to double the ratios of positive to negative interactions. The researchers met with the family teachers two times per week to review their progress. The family teachers were trained weekly on ways to avoid negative interactions (i.e., ignoring minor misbehavior such as not saying "please"). The dependent measure was a Parent Daily Report completed daily by the boys' family teacher. This checklist reflected occurrences of problem behavior in the previous 24 hours. Analysis of data indicated that increasing the ratio of positive to negative interactions (baseline ranged from 2.5:1 to 5.3:1 and increased a range of 4.7:1

to 11.2:1 during the intervention phase) resulted in a significant decrease in behavior problems. The results of this study were limited in that data did not indicate experimental control for three of the six boys (reductions of daily behavior problems did not occur with the implementation phase). However there was an overall reduction of problem behavior in two of these three boys over the course of the intervention phase). This study provides support for the contention that nonpunitive, positive interventions can be effective in reducing problem behavior in alternative settings.

A few reports are available that specifically document the outcomes following the implementation of PBS in alternative educational. Sidana (2006) provided a summary of outcomes reported by the Iowa Juvenile Home and the Illinois Youth Center. In 2001, the Iowa Juvenile Home, a facility that serves approximately 100 youths (mostly female), was selected by the Iowa Behavior Alliance as 1 of 14 grant sites to receive PBS trainings over a 3-year period. The initial step in the facility's PBS implementation involved the development of a PBS steering committee with representatives from the facilities' departments (e.g., educational, clinical). This team worked to create the facility-wide behavioral expectations to be taught to all students as part of the primary level prevention. All students were taught the expectations in both school and clinical settings and a reward system was developed that was directly contingent upon the students meeting facility-wide expectations. Secondary level interventions were implemented for students who continued to require added support after primary level preventions were in place. Secondary level interventions were provided for groups of 10 or more students with similar behavioral needs, and these students were provided with extra attention prior to school beginning, and throughout the day in order to prevent attention-seeking

problem behavior from occurring. Students with intensive needs were provided tertiary level interventions, often based on functional behavioral assessment. The principal at this facility contended that while the students in the program would represent students with the most critical needs if they were in typical educational settings (i.e., Tier 3), the three-tiered model of support was effective within the facility. The Iowa Juvenile Home modified this based on the needs of students in the facility, indicating that primary level prevention was effective for 29% of students. Twenty-five percent of students required secondary level interventions, and 46% required tertiary level interventions. Following a 15-month period of PBS implementation in the facility's educational unit and some of the housing units, a 73% reduction in the use of restraints was documented as well as a 50% reduction of behavior referrals over the next 4 years.

Sidana (2006) also provided a summary of the Illinois Youth Center (IYC), a facility that serves as a boys' prison. The IYC began the process of implementing PBS in 2001 following teacher requests for assistance with classroom management strategies. Data from the facility indicated that the majority of the behavioral infractions resulted from a small percentage of students. Following a 1-day staff training that served as an introduction to PBS, the IYC administrators had all staff vote on whether or not they had an interest in pursuing PBS in the facility. Results of the vote showed that the program staff members were strongly in favor of implementing a system of PBS. A PBS committee was developed in the facility, and this team made preparations to begin PBS over a 5-month period. In this time, facility-wide expectations and policies for teaching those expectations were developed. Teachers were given the opportunity to define these rules within the context of their classrooms. In the course of a 1-week orientation, all



students were taught the facility-wide expectations. Following the orientation, a social skills lesson was given one time per week. The topics of the social skills lessons were tied to the facility-wide expectations. Students were randomly rewarded throughout the week for demonstrating the week's target social skill. Secondary level interventions were introduced and included mentoring as well as teacher and peer directed mediation sessions. Tertiary level supports were provided for students with extreme behavioral needs. These students were provided a 6-week behavior management program. During the first 4 weeks of the behavior management program, students were isolated from the general population, and were required to work with teachers, counselors, security staff, and mental health workers to improve skills. If the student was successful during the first 4 weeks of the behavior management program, weeks 5 and 6 became a probationary period in which the student would return to regular classes. In the month prior to PBS implementation, 32 fights were documented in the IYC school. Over the next 3 years of implementation no fights were documented. The principal at this facility reported a reduction in the number of minor and major behavioral infractions each year over a 5-year period (Clarida, 2005). Additionally, when disciplinary problems were presented, the principal suggested that staff were better equipped to establish the cause of the problem behavior and successfully resolve the issue. The principal reported that the IYC has experienced a complete shift from a negative to a positive climate, and the reduction in problem behavior has been dramatic.

A third study evaluated PBS at a school-wide level (Tier 1) in an alternative school setting that served students in grades 5-12, who had been identified as having emotional disturbance or were identified as otherwise health impaired. Farkas, et al.

(2012) assessed the fidelity of PBS implementation, the effects of PBS on student outcomes, and the perspectives of staff and students regarding PBS implementation in a junior-senior high school setting for students referred by local school districts. During this investigation, there were a total of 21 members of the staff, and an average of 44 students at any given time. In this program, students were placed on one of three levels based on behavior (levels A, B, and C, with A being the highest level) at the end of each week based on the number of points earned during the week. To evaluate student outcomes, Farkas, et al. documented the percentage of students who remained on levels A and B both prior to PBS implementation (baseline phase) and following PBS implementation. Additionally, office discipline referrals were measured. The results of this study indicated that during the baseline phase, 45.95% of students remained on levels A and B. Following PBS implementation, 59.25% of students remained on levels A and B. Office discipline referral data indicated a 42.9% reduction in ODRs following PBS implementation.

Simonsen, Britton, and Young (2010) conducted a 3-year descriptive case study to evaluate the impact of SWPBS (Tier 1) in an alternative school setting. The first outcome measures included climate data. Monthly data were taken for each staff member on providing opportunities for students to respond and on the ratio of positive to corrective feedback delivered by each staff member. The second outcome measure evaluated student performance. Student outcome data were collected on serious incidents, including those which required physical management (e.g., restraint) and incidents where students eloped or attempted to elope from the campus. Simonsen and colleagues documented a decreasing trend in serious incidents that began immediately after

beginning SWPBS. In addition to measuring the overall incident reports, the distribution of incident reports across students was examined. Students without any occurrences of aggressive behavior in a month were considered responsive to universal prevention measures. The percentage of students who met this criterion increased from 70% prior to PBS implementation to 83% during the 2<sup>nd</sup> year of PBS implementation.

### *Model of Positive Behavior Support in Alternative Settings*

The primary purpose in many alternative educational settings is rehabilitation. According to the PBS Implementation Blueprint (OSEP, 2007) for facility-wide PBS, youth must meet three expectations in order to achieve rehabilitation. These expectations include a) academic achievement, b) social skill competence, and c) meaningful lifestyle skills that allow youth to become law-abiding citizens and make meaningful contributions to society. The term “facility-wide PBS” is equivalent to primary level prevention in typical educational environments.

Alternative program administrators and researchers are calling for systems of PBS in alternative educational settings that are designed to meet the complex needs of the youth served. Youth in alternative educational settings have the same rights to an appropriate education as their peers in traditional settings, and youth with disabilities in alternative educational settings must be afforded the services as required by law. Even within alternative placements there are youth who have more intensive academic and social needs (Houchins, et al., 2005). In alternative educational settings, PBS is not effective as a top-down model in which initial efforts are geared primarily toward students who need highly individualized and intensive interventions (Scott, et al., 2002).

Prevention at a program or facility wide level should be strongly emphasized in the early phases of implementation in order to reduce the number of students requiring intensive supports.

Houchins, et al. (2005) have outlined a model for PBS in juvenile justice settings that includes primary, secondary, and tertiary support. At the primary level, behavioral expectations should be taught, modeled, and reinforced with all staff, security personnel, and students. Data-based decisions making should be used to adapt the educational environment to maximize positive behaviors. All program staff should regularly provide reinforcement to students who meet behavioral expectations. At the secondary level, students who require more focused academic or behavior support should be grouped to receive added support. For example, students who fail to meet behavioral or academic expectations may receive additional small-group social skills or academic instruction. For students who require secondary level supports, staff should provide opportunities for students to self-assess performance. At the tertiary level of support for the most students seriously at risk, on-going collaboration should exist between the courts, the public school, mental health providers, and the student's family to provide highly individualized interventions. Planning should include support for the student to transition out of the placement. At the tertiary level, curricular accommodations should be identified through functional behavior assessment, and implemented through structured behavioral intervention plans (Houchins, et al., 2005).

## Measuring the Implementation of Positive Behavior Support

As PBS begins to extend to alternative educational settings, a system for determining the level of fidelity with which the program or facility implements PBS is necessary. In typical school settings, two measures, the *Effective Behavior Support Survey* (EBS; Sugai, Horner, & Todd, 2000) and the *School-Wide Evaluation Tool* (SET; Horner, et al., 2004; Sugai, Lewis-Palmer, Todd, & Horner, 2001) are used to measure PBS implementation. The EBSSAS is a self-report measure that PBS teams use both during the initial planning of PBS and thereafter on an annual basis. The purpose of the EBSSAS is to assess current levels of PBS implementation and identify the need for improvement in: a) school-wide behavior support systems, b) nonclassroom management systems, and c) individual behavioral supports with students with intensive needs. The SET is a 28-item research instrument used by an external observer to measure the degree to which a school has systems of school-wide PBS in place. Both the EBSSAS and the SET focus on PBS at the primary or school-wide level, though the features they examine do not completely overlap.

In a study correlating scores on the SET with the sections on the EBSSAS that assess school-wide behavioral supports, Horner, et al., (2004) indicated that the SET exceeds the basic psychometric criteria for measurement tools used in educational research, and can be administered with high interobserver reliability and with high test-retest reliability.

The SET has been adapted for use in alternative settings and is called the *Program-Wide Evaluation Tool* (PET; Sugai, et al, 2001). The PET is designed to evaluate the extent to which critical features of program-wide PBS are in place across

various settings within an alternative program. Data for the PET are gathered through archival student records, observations, and interviews with both staff and students. The results of the PET provide the program's PBS team with percentages of features that have not begun, features in the initial planning phases, and features that are in the implementation and maintenance phase. The PET is designed to show improvement over time when used on an annual basis.

The diversity among students and types of alternative education programs makes the implementation of PBS more complex in these settings than in typical educational settings. Additionally, while alternative education program staff generally collect copious amounts of data, these data are often not incorporated into the decision making process about the effectiveness of disciplinary strategies (Nelson, et al., 2009). The expansion of PBS into alternative educational settings is in the initial phases, but existing reports reveal the benefits youth in these settings reap from positive behavior supports.

Alternative educational programs in which systems of PBS are being facilitated have shown dramatic reductions in problem behavior and the use of isolation or restraints as well as an increase in students' self-esteem and prosocial behaviors (Friman & Jones, 1997; Nichols & Utesch, 1998; Sidana, 2006, Farkas, et al., 2012). Empirical investigations of PBS in alternative educational settings are scarce, and future studies should assess both short-term and long-term outcomes of students in these programs. As the practice of PBS in alternative programs becomes more prevalent, critical features of PBS in these settings should be defined and validated by empirical research, and procedures for measuring the implementation fidelity should be outlined. The justification of the current study is to contribute to existing literature by providing a

model of PBS implementation in an alternative educational setting that can be replicated in other alternative education programs, and provide data to demonstrate short-term student outcomes and staff attitudes regarding the system of PBS.

### Purpose of Investigation and Research Questions

The present study is descriptive in nature, and will focus on an alternative education program that operates in conjunction with a local mental health provider, to provide services for approximately 100-150 elementary and secondary students per year. The program focuses on improving student academic and social skills. The primary aims of this study were to extensively examine the level to which PBS is currently being implemented within an alternative education program, determine if strengthening the system of PBS leads to improved student outcomes, and gain perspectives about teacher and staff attitudes regarding the implementation of PBS. The specific research questions were as follows: (a) did positive behavior support (PBS) implementation improve from initial to follow-up assessment as measured by the Program-wide Evaluation Tool? (b) did staff perceptions of critical areas of need within the system of behavior support change from the initial to the follow-up assessment as measured by the Effective Behavior Supports Survey? (c) did effective implementation of PBS lead to improved student outcomes as demonstrated by decreases in the use of an alternative structure room, increases in points earned on Daily Interaction Sheets, improved grades, and improved scores on the Youth Outcome Questionnaire? and d) what were staff attitudes and perceptions regarding the acceptability and effectiveness of the PBS program?

## CHAPTER 2

### METHOD

#### Setting and Participants

The alternative education program that was evaluated was located in an urban school district in an intermountain state, and operates in conjunction with a local mental health provider to serve approximately 100 elementary and secondary students per year. These students are placed in the program due to (a) requests from parents, guardians, or neighborhood school personnel, (b) official expulsion from their neighborhood schools, or (c) requirements of the juvenile justice system. Most students who attend this alternative educational program are in need of intensive supports to improve both academic and social skills.

The physical facility is comprised of an administration building, a school and day-treatment building, a residential alcohol and drug transition group building which also houses a girls-only day treatment unit (for girls with borderline personality disorder or other characteristics that are unsuitable for the co-ed day-treatment environment), a secure boys only alcohol and drug unit (residential), a secure girls only alcohol and drug unit (residential), and a building that houses a day treatment program for juvenile sex



offenders (the Star Program). Students in the secure alcohol and drug units must complete levels 1-4 of the program before progressing to the co-ed transitional alcohol and drug unit (levels 5-7). The transitional alcohol and drug program is a residential program. However, it includes supervised off campus privileges.

In the spring of 2009, a total of 106 students were enrolled in the program, all but one at the secondary grade level (grades 6-12). Of these students, 53% had Individual Education Programs (IEPs). The majority of the students attending were Caucasian (approximately 70%). Approximately 25% of the students were Latino, and the remaining 5% of students were African American, Asian, or Pacific Islander. Approximately 65% of the students are in grades 7 through 9, with approximately 35% of students in grades 10 through 12. Occasionally, a 6<sup>th</sup> grade student participates in the program. The length of participation in the program varies significantly, with an average of 6 months to a year. However, some students have participated in the program for up to 5 years.

The program included a total of 10 different treatment groups, averaging 10-15 students per group. The program included six day-treatment groups for students with severe problem behavior, a day-treatment group for juvenile sex offenders, two secure residential alcohol and drug treatment groups (one for boys and one for girls), and a residential co-ed transitional alcohol and drug treatment group. Students were assigned to groups based on age, common treatment and behavioral goals, and diagnostic criteria. Each group of 10-15 students had an assigned teacher, therapist, and counselor to help students achieve their goals and complete the program. Students received instruction on core academic subjects, and also spent time in therapeutic settings (e.g., individual,

group, or family therapy, social skills training). During academic instruction, a teacher, a teaching assistant, and a student advocate were present in each class. There were approximately 40 staff members on site at the facility.

Previous attempts to implement PBS at this facility never fully came to fruition due to a variety of barriers. Prior to this study, the facility had a positive behavior support committee in place, but the committee lacked guidance and a systematic method for implementing PBS. For example, the PET had been conducted prior to this researcher's investigation. However, the results were not then used to guide decisions in regard to the implementation of PBS. There were some staff members who perceived the implementation of PBS as requiring too much effort, while others felt that PBS would provide too much reinforcement for expected behaviors. Lastly, the effort required to make programmatic changes to a system already in place seemed to interfere with progress toward effective implementation of PBS.

## Measurement

### *Program-wide Evaluation Tool*

The PET is used to determine the percentage of critical elements of primary level, and universal prevention services that are in place in a school or other setting. This measure assesses PBS implementation across multiple settings (classroom and non-classroom settings) in alternative educational programs. The PET was adapted from the School-wide Evaluation Tool (SET; Sugai, Lewis-Palmer, Todd, & Horner, 2001), which has been used to measure the critical features of primary level prevention services in place in typical educational settings. Structurally, the PET is identical to the SET.

However, the wording has been amended for alternative education programs. For example, rather than “school-wide procedures,” the wording of the PET is changed to “facility-wide procedures,” encompassing the variability encountered in alternative education settings. A copy of the PET is provided in Appendix A.

Information for the PET is obtained through a review of permanent products (e.g., program discipline handbook, social skills instruction materials, behavior incident forms), direct observations (e.g., verifying program-wide rules are posted, observing staff), and brief student and staff interviews. Critical features of program-wide behavior supports evaluated by the PET include whether (a) expectations are defined, (b) behavioral expectations are taught, (c) there is an on-going system for rewarding behavioral expectations, (d) there is a system for responding to behavioral violations, (e) data are collected and used for monitoring and decision making, and (f) there is support from administrators and district-level personnel. The PET has a series of evaluation questions for each feature, in which the evaluator identifies the source of data (e.g., permanent product, interview, or observation) and assigns a score ranging from zero to two. A score of zero indicates that the implementation of a feature has not been initiated, a score of one indicates that implementation of the feature is in the planning phase, and a score of two indicates that the feature is currently being implemented or is in the maintenance phase. Following administration of the PET, the percentages of the total possible are calculated. The results are summarized to distinguish critical features that are not targeted or initiated, are in the planning phase, or are in the implementation and maintenance phase. The total score on the PET is based on critical elements of PBS that are given a score of one (indicating that the feature is in the planning phase) or a score of two

(indicating the feature is in the implementation or maintenance phase). In addition to providing a percentage of critical elements of PBS that are in place, the results of the PET can be used in planning annual goals for program-wide behavior support (based on critical features of PBS that are not in place or are in the planning phase). When the PET is administered repeatedly over time, the results can be used to compare levels of PBS implementation across academic years. While psychometric properties have not been evaluated for the PET, they have been evaluated for the SET (Horner, et al., 2004). Horner, et al. assessed test-retest scores, internal consistency, and interobserver agreement. The test-retest scores were derived from eight elementary schools for which the SET was administered twice in a 14- to 20-day period. The SET total score test-retest reliability assessment was 97.3% with regard to item-by-item agreement. Item/total SET score correlations, and subscale/total SET score correlations produced a reliability coefficient of .96. The interobserver agreement for the SET was based on the extent to which two independent observers were consistent in recording information from 17 schools. The interobserver score was derived from an item-by-item comparison. The average interobserver agreement was 99% (range = 98.4-100%). To determine the extent to which scores on the SET can be used as indices of PBS implementation, the construct validity of the SET was evaluated. Total SET scores were correlated with scores from the Effective Behavior Supports Survey. The SET scores and the EBS scores from 31 schools were compared using Pearson's Product Moment Correlation, which resulted in a correlation coefficient of .75 ( $p \leq .01$ ) for total scores. Because the psychometric properties of the SET seem adequate for research, the assumption is being made that the scores from the PET will provide a valid assessment of the extent to which PBS is being

successfully implemented in the alternative education setting.

### *Effective Behavior Support Survey*

The EBS is a survey completed by school and program staff to assess behavior supports within a school (Sugai, Horner, & Todd, 2000; see Appendix B). The survey measures the current status and need for improvement of (a) school-wide behavioral supports, (b) nonclassroom behavior management systems (e.g., cafeteria, hallways), (c) classroom behavior management systems, and (d) individual behavioral supports. The EBS includes 18 items to address features of school-wide systems, 9 items to address features of nonclassroom systems, 11 items to address classroom systems, and 8 items to address individual student supports. For each item the respondent identifies whether that feature is in place, partially in place, or not in place, the priority for improvement for each feature as being high, medium, or low. Once the surveys are completed, the total numbers of responses under each level of implementation for each item, and the total numbers of responses for how staff rated the need for improvement for each feature are calculated. The data from EBS are then used to create an action plan for developing new systems of behavioral supports and improving existing behavioral supports. (See Appendix B for an example of the EBS scoring system.)

The technical characteristics of the EBS have been assessed in a study that included staff members from two elementary schools ( $n = 16$  and  $n = 20$ ) and one middle school ( $n = 44$ ; Safran, 2006). Internal consistency reliability scores were obtained by correlating the scores of all members within each school (e.g., scores from participants in school 1 were correlated with the scores from other participants in school 1 for each of

the subsections. Additionally, a total scale reliability score was obtained for the four sections combined to assess the level of consistency with which members of the same school completed the survey. The scores of ratings of the current status and the scores for improvement priority were correlated. For example, for each item of the survey, the current status rating (i.e., in place, partially in place, or not in place) from one participant was compared to how other participants from the same school rated that particular item. The participant's rating of improvement priority was also compared to how other members of that school rated the improvement priority for that particular item. The reliability coefficients were based on how consistently staff members within the same school rated the current status and improvement priority for each of the four subsections of the survey (school-wide systems, classroom systems, nonclassroom systems, and individual systems). The total scale reliability coefficient was based on all four sections of the survey combined. The total scale internal consistency reliability rating consisted of a moderate to high reliability score for the current status of supports in place ( $\alpha = .85$ ) and a high reliability score for improvement priority scores ( $\alpha = .94$ ). These coefficients were based on how consistently staff members within the same school rated each of the sections of the survey. There was more variability in the ratings of the current status of supports in place from staff within the same school. The ratings of the improvement priority were more similar among various staff within the same school. The construct validity of the EBS was assessed by examining the extent to which the results of the EBS (i.e., which types of behavior supports were reported to have the highest priority for improvement) were used to develop a plan for improving systems of behavior support in the middle school. The results on the EBS from the 44 middle school participants

indicated that individual student support systems were rated as the highest priority for improvement. The mean score for the current status of individual student support systems was 1.5 (with a score of 1 meaning not in place, 2 meaning partially in place and 3 in place). The mean score for priority of improvement was 2.5 (with a score of 1 meaning low priority, 2 meaning medium priority, and 3 meaning high priority). Staff members from this school chose to first focus on the improvement of nonclassroom settings before individual systems of support. The author of this study noted that while the survey results did not dictate the choice of interventions to focus on initially, critical information was produced by the survey's results that assisted in the collaborative process of creating an action plan for improving systems of behavior supports. While schools that have used the EBS have documented positive benefits to students (Safran, 2006), additional research is needed to provide more thorough evidence of the usefulness of the EBS in guiding schools in creating an action plan for improving systems of behavior support.

### *Daily Interaction Sheets*

Daily Interaction Sheets (DISs) were filled out daily by staff and teachers for each day treatment student (see Appendix C). The DISs were based on the program-wide behavioral expectations: (a) follow rules, (b) use positive social skills, (c) participate, (d) respect self and others, and (e) be responsible. Students were given a score ranging from zero to four for each of the facility-wide expectations at the end of each period of the day including lunch and breaks. A score of four indicated that the student had excellent participation and was a positive role model for other students. A score of three indicated that the student had good participation and took care of his or her own needs. A score of

two indicated that the student responded to requests the first time they were given and had minimal participation. A score of one indicated that the student required multiple prompts to respond to requests, and a score of zero indicated that the student refused to participate or was referred to the Alternative Structure Room (a precursor to in-school suspension). The total number of points a student can earn per day varied, based on early dismissal from school, assemblies, or other changes to the schedule. For each student, the percentage of points earned from the total points possible was calculated each day.

### *Youth Outcome Questionnaire*

The *Youth Outcome Questionnaire Self-Report* (YOQ-SR; Burlingame, et al., 2001) is the adolescent self-report version of the *Youth Outcome Questionnaire* (see Appendix D). The YOQ-SR is a 64-item survey designed to track progress toward treatment goals and measure outcomes for adolescents receiving mental health services (Burlingame, Gawain Wells, Lambert, & Cox, 2004). The YOQ-SR has six subscales to measure behavioral difficulties and elements of healthy behavior. The subscales are as follows: a) intrapersonal distress, b) somatic, c) interpersonal relations, d) critical items, e) social problems, and f) behavioral dysfunction. The first subscale, *intrapersonal distress* is directed toward assessing change in emotional distress including anxiety, depression, fearfulness, hopelessness, and self-harm. The *somatic* subscale assesses change in somatic distress typical in psychiatric presentation including headaches, dizziness, stomachaches, nausea, and pain or weakness in joints. The subscale *interpersonal relations* assesses change in the student's relationship with parents, other adults, and peers. This subscale also assesses attitudes towards others, interactions with



friends, aggressiveness, arguing, and defiance. The *critical items* subscale is designed to assess symptoms often present for patients receiving inpatient services. This subsection is useful for determining treatment needs when short-term stabilization is the immediate goal. The critical items assess changes in paranoia, obsessive-compulsive behavior, hallucination, delusions, suicidal tendencies, mania, and eating disorder issues. The *social problems* subscale assesses changes in problematic social behaviors including truancy, sexual problems, running away from home, destruction of property, and substance abuse. The final subscale, *behavioral dysfunction* assesses change in a student's ability to organize tasks, complete assignments, concentrate, handle frustration, and includes items related to inattention, hyperactivity, and impulsivity. The YOQ has high test-retest reliability ( $r = .84$ ), and adequate inter-rater reliability between mothers and fathers ( $r = .71$ ; Wells, Lambert, Latkowski, & Ferre, 2008). The correlation between the parent version (YOQ 2.0) and the YOQ-SR (adolescent self-report version) is substantially lower. The interrater reliability between youth and their fathers was .45 and was .58 between youth and their mothers. The total score on the YOQ quantifies the respondent's overall level of disturbance. A cut off score of 46 has been assigned to the YOQ, with any score below 46 indicating that the respondent is functioning in the normal range. A score of 46 or above is considered to be in the clinical range, indicating that the respondent is functioning in the dysfunctional range, and has mental health needs that require treatment. The reliable change index for the YOQ-SR is 13 points, signifying that a respondent's score must change a minimum of 13 points for that change to be clinically significant. Using cut off scores and reliable change indices (change scores that exceed the reliable change indices are indicative of significant improvement), the YOQ-SR

determines the respondent's behavioral similarity to populations of youth in residential treatment, partial hospital treatment, outpatient treatment, and a large sample of untreated youth from the community. High scores on the critical items subscale indicate students who are in need of intervention more intensive than standard outpatient treatment.

#### *Frequency of Use of the Alternative Structure Room*

The Alternative Structure Room (ASR) is the program's in-school exclusionary time-out period, which served as a precursor to in-school suspension for day-treatment students. Each period throughout the school day that a student spent in the ASR was counted as one occurrence of the use of the ASR. Data on the total occurrences of the use of ASR per treatment group were collected for the 2008-2009 academic year.

#### *Student Grades*

Data on student grades were gathered on a quarterly basis. Students received grades for math, social studies, science, English, art and physical education. Additionally, 10<sup>th</sup>-12<sup>th</sup> grade students received grades for computer science, and financial literacy. Student grades were reported as grade point average (e.g., reported as 3.32 rather than a B+). Grades from all four quarters were compared to determine if there were any improvements across the four quarters that could be associated with improvements to the program's behavior supports.

#### *Positive Behavior Support Acceptability Questionnaire*

A Positive Behavior Support Acceptability Questionnaire survey was created by

the primary researcher and used to document staff attitudes regarding the system of PBS (see Appendix E). The Positive Behavior Supports Acceptability Questionnaire included nine questions. A 5-point format (1 = strongly disagree, 5 = strongly agree) was used for questions 1 through 7, and an open-ended format was used for questions 8 and 9.

### Procedures

This study employed a quasi-experimental, pre/post design. The initial step in this study was to administer the PET and the EBS to determine the extent to which critical elements of behavioral support services were in place in the program, and identify critical areas of need for elements not in place, or not fully in place. The PET and the EBS were administered at the start of 2008-2009 school year and a follow-up assessment was administered at the end of the 2008-2009 school year. The total percentages of critical elements of PBS identified by the PET as in place, partially in place, or not in place from the pre-test were then compared to the percentages of critical elements in place, partially in place, or not in place on the post-test. Pre and post-test scores from the EBS were compared to look for significant differences in the ratings of current status and improvement priority for each of the four subsections and for the total scale.

The PET involved interviews with program administrators, staff, teachers, and students. Observations were conducted in classroom and nonclassroom settings. Additionally, there was an assessment of permanent products (such as the program's discipline handbook). The primary researcher worked collaboratively with the program's administrators and the program's Positive Behavior Interventions and Supports Committee to address and improve areas of need within the program's primary level

prevention services that were identified in the initial assessments. This included beginning each school day with a review of the program-wide expectations, so that all students knew and understood these expectations. The principal investigator attended weekly meetings with the Positive Behavior Interventions and Supports Committee (the program specialist, 2-3 teachers, 2-3 therapists, and 2-3 counselors) and served the function of a positive behavior support coach. The primary researcher assisted the program staff in developing curricula for teaching the program-wide expectations to all students in the various program settings and developed behavioral supports to address the areas in need of improvement as identified by the PET and the EBS.

At the start of the spring of 2009 semester, an assembly was held for all students, in which the program-wide behavioral expectations were explicitly taught, practiced, and reinforced. During this assembly, students were divided into groups that rotated through nine stations in which each station addressed the program-wide expectations in a specific setting. A matrix in which expectations are defined in each program setting was used to guide the teaching of expectations to students. The nine stations students attended during the assembly included meeting expectations 1) in the restroom, 2) during group sessions, 3) in the cafeteria, 4) in the van, 5) in the community, 6) in the classrooms, 7) in the hallways, 8) with the uniform policy, and 9) in the ASR. In addition to improving efforts to teach behavioral expectations to students, during the spring of 2009, a mandatory, half-day training was conducted by the primary researcher for all staff (day treatment staff, teachers, counselors, advocates, and classroom aides). The objectives of this training included (a) an overview of the critical elements of PBS, (b) antecedent intervention strategies to prevent and reduce problem behaviors, (c) effective classroom management

strategies, and (d) an overview of the programs disciplinary procedures for responding to problem behaviors.

Student outcome data (i.e., Daily Interaction Sheets, use of the Alternative Structure Room, the Youth Outcome Questionnaire, and student grades) were examined to assess the effectiveness of the program's primary level prevention services. The DIS and the ASR were specific to the day treatment program, so the residential treatment groups were not included in these analyses. At the end of each school day, the percentage of total possible points each student earned on the Daily Interaction Sheet was calculated. Daily Interaction Sheet scores were directly tied to the program's level system. A score of two on each item is expected, and scores of three and four are required for students to advance to higher levels. All students began the program at Level 1. When students begin the program, they are assessed to determine their risk factors (e.g., substance abuse issues, mental health problems, involvement in the juvenile justice system, poor academic performance). A treatment plan was created to address the issues with that particular student, including determining how the student can be reintegrated in typical schools. The treatment plan includes determining the percentage of points the student should earn on the DIS at specified time intervals and creating an aim line on the graphic display of data (e.g., the percentage of points earned should increase from 50% to 60% following 4 weeks of treatment). Students move from Level One to Level Two when they have earned a percentage of points on DISs based on goals set in their initial assessment. The student must maintain that percentage of points for 2 consecutive days to advance in levels. To move from Level Two to Level Three, treatment goals must be met for 3 consecutive days, to move from Level Three to Level Four goals must be met for 4

consecutive sessions. Treatment goals must be met for 10 consecutive days to advance through Levels Five through Seven. One unsuccessful day (the percentage of points earned was below the treatment goal) results in a level drop for students on levels one through four. At levels five through seven there is a “limbo period,” where students can have 1 unsuccessful day without dropping to a lower level. Data from student DISs were summarized, and the average percentage of points earned for each student was entered into an electronic database to run statistical analyses. The percentages of points students earned on the DIS at the start of the school year were compared to the percentages of points students earned on the DIS in the final month of the school year.

When students were referred to ASR, they were supervised by a counselor or advocate in the designated ASR room. If multiple students were sent to the ASR during the same period, an alternate room adjacent to the primary room was used also. In these instances, a second staff member was asked to assist in monitoring the students in the ASR. Once in ASR, prior to returning to their regular classroom, students were required to complete a processing sheet to evaluate their behavior and complete all work that was assigned during the class period they missed. Upon meeting these requirements, students were required to discuss the processing sheet with the staff member who made the referral to ASR before being granted permission to return to regular classes. When a teacher or staff member referred a student to ASR, he or she was responsible for recording the date and time, the name of the student, and the behavior that resulted in the referral. Data for the ASR were graphed weekly to display total occurrences of referrals to the ASR, the number of students per treatment group referred to ASR, the number of students referred to ASR per period of the school day, and the number of students with

three or more referrals to the ASR per week. The ASR data were reviewed on a weekly basis to monitor student progress, and if needed, make modifications to the program-wide behavior supports. Near the end of the 2008-2009 academic year, a PBS acceptability questionnaire was administered to assess levels of staff and teacher satisfaction regarding the overall effectiveness of the program's system of PBS.

### Data Analysis

All data, including percentages on the PET and the EBS during pre and post assessments, mean percentages of points earned on DISs during pre and post assessments, frequency of ASR use per week, grades for the four quarters, and YOQ scores from pre and post assessments, were entered into an electronic database for statistical analysis. A *t*-test for nonindependent means was conducted to determine whether or not there was a significant difference in the average percentages of points students earned on DISs during the beginning of the academic year and the end of the year. A one-way ANOVA for repeated measures was used to determine if there were differences in the frequency of referrals to the ASR per week. The Friedman Test was used to assess possible changes in students' grades across the four quarters of the school year. The Wilcoxon matched-pairs signed-ranks test was conducted to compare mean scores on the YOQ from the start of the academic year with mean scores on the YOQ at the end of the academic year.

## CHAPTER 3

### RESULTS

The research questions for the current study were as follows: (a) did positive behavior support (PBS) implementation improve from initial to follow-up assessment as measured by the Program-wide Evaluation Tool? (b) did staff perceptions of critical areas of need within the system of behavior support change from the initial to the follow-up assessment as measured by the Effective Behavior Supports Survey? (c) did effective implementation of PBS lead to improved student outcomes as demonstrated by decreases in the use of the alternative structure room, increases in points earned on Daily Interaction Sheets, improved grades, and improved scores on the Youth Outcome Questionnaire? and d) what were staff attitudes and perceptions regarding the acceptability and effectiveness of the PBS program?

#### Program-Wide Evaluation Tool (PET)

The initial administration of the PET was conducted in the fall of 2008, and was used as an indicator of baseline levels. A follow-up administration of the PET was conducted in May 2009. First, the total percentages of the features of PBS that were reported as being currently implemented during baseline and follow-up assessments were



compared. Results indicated that at the time of the initial administration of the PET, 43% of the total features of PBS measured by the PET were being implemented (given a score of 2). The follow-up administration of the PET (conducted in May 2009) indicated that 93% of the features of PBS, as measured by the PET, were being implemented and were in the maintenance phase. Further investigation revealed that improvement in the implementation of PBS was documented across six of the seven categories evaluated by the PET, excluding the category of the PET evaluates District-Level Support, which includes two evaluation questions. In the follow-up assessment, 100% of features were in place for five of the seven categories included on the PET, including (a) expectations defined, (b) behavioral expectations taught, (c) on-going system for rewarding behavioral expectations, (d) system for responding to behavioral violations, and (e) monitoring and decision making. The remaining two categories included “Management” and “District Level Support.” Of the eight questions under the category, “Management,” an increase was documented from four of the eight questions being in place during the initial administration of the PET to seven of the eight questions being in place during the follow-up assessment. Under the category “Management,” the feature that was determined to be only partially in place was “having an administrator as a member of the Positive Behavior Interventions and Supports (PBIS) team.” During the initial implementation of the PET, there was not an administrator included on the PBIS team. At the time of the follow-up assessment, an administrator was somewhat involved in the weekly PBIS committee meetings, but was not available to participate in weekly meetings on a consistent basis. The final category included on the PET is “District Level Support.” The results indicated that one of the two items under this category was in place

during both initial and follow-up assessments. The second item under this category, “Does the program budget contain an allocated amount of money for building and maintaining program-wide behavioral support?” was given a score of 0 on both the initial and the follow-up assessments. Figure 1 illustrates the percentages of total points for each of the categories of the PET during the initial and the follow-up assessments.

Overall, PBS implementation evolved from the program utilizing a few key elements of PBS (e.g., developing five program-wide behavioral expectations) to developing a system of PBS that fully encompassed all program settings and activities. Figure 2 depicts the total number of features given a score of zero, one, or two during the follow-up assessments.

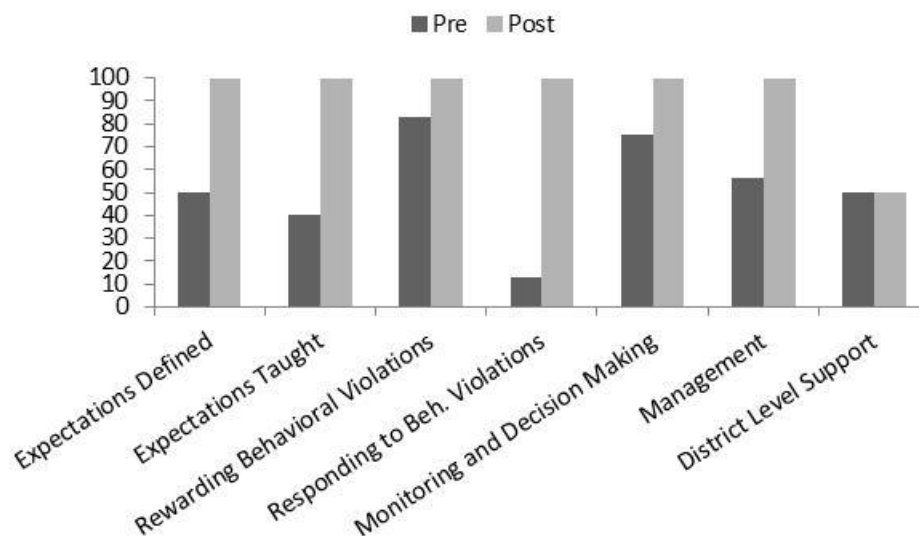


Figure 1. Percentages of features in place on the Program-Wide Evaluation Tool.

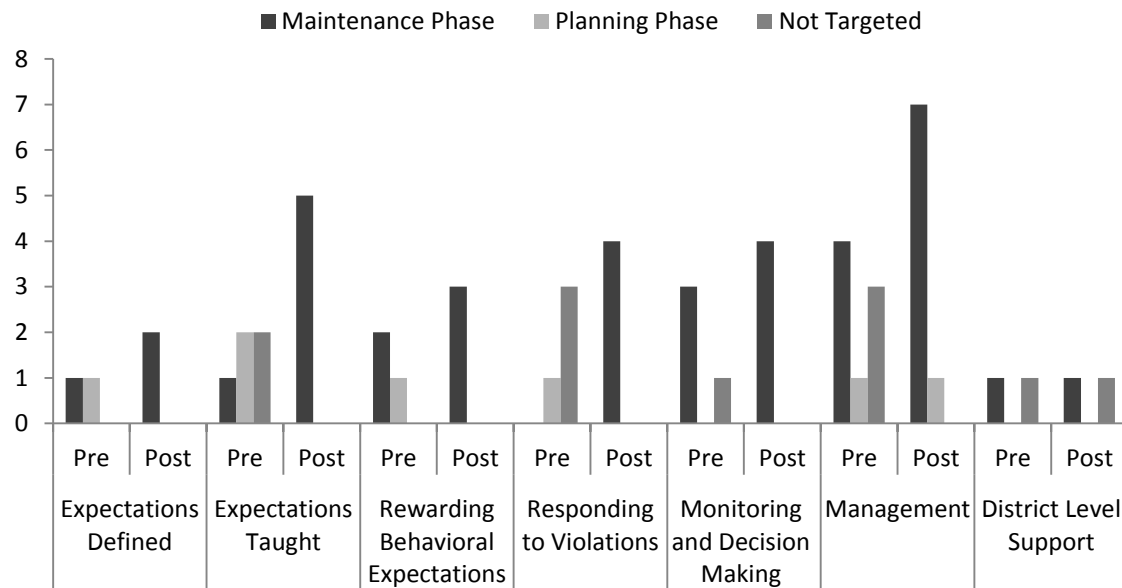


Figure 2. Results of the Program-Wide Evaluation Tool.

### Effective Behavior Supports Survey (EBS)

The EBS was distributed to all program staff in the fall of 2008 and again in the spring of 2009 to assess the current status of behavior supports and determine areas in need of improvement. The EBS was used to assess school-wide behavior supports, non-classroom behavior managements systems, classroom behavior management systems, and individual behavior supports. The initial scores from the fall of 2008 were compared with scores from the follow-up administration of the EBS conducted in June of 2009.

Approximately 45 surveys were distributed among staff members for both the initial and the follow-up assessment. In order to maintain confidentiality, all staff members were

assigned a 4-digit code. Only the surveys from staff members who completed and returned the survey both during initial and follow-up assessments were analyzed. Of the approximately 45 staff members who were given surveys, 21 staff returned the EBS during both the initial and follow-up assessments. The EBS consists of a total of 46 questions, including 18 questions to evaluate school-wide systems, 9 questions to evaluate nonclassroom settings, 11 questions to evaluate classroom systems, and 8 questions to evaluate individual student systems of behavior support. Each of the 46 features is categorized as being in place, partially in place, or not in place. Additionally, each item is categorized as being a high, medium, or low priority for improvement.

Descriptive analysis indicated that the mean percent of features rated as “In Place” increased from 41.7% percent in the initial assessment to 57.2% during the follow-up assessment. Across the 21 surveys that were analyzed, the percentage of school-wide systems identified as “In Place” increased from 44% to 61%. The mean for nonclassroom systems increased from 43% to 61%, 42% to 54% for classroom systems, and 35% to 49% for individual systems of support. Decreases in the mean for features categorized as “Not In Place” decreased across all categories of the EBS. Under the category “School-Wide Systems,” staff indicated that the direct teaching of behavioral expectations to students continued to be an area in need of improvement during the follow-up assessment. The initial administration of the EBS indicated that staff felt that there was a high need for improvement in consistently providing rewards for students who engaged in expected behaviors. However, during the follow-up assessment, this item was no longer determined to be a low priority for improvement. This finding suggests that the development of interventions such as the “Stay in Class” intervention (which

allowed students to earn free-dress passes for completing a week without being referred to the Alternate Structure Room) were beneficial in creating uniform standards for reinforcing students who abided by the program-wide expectations. Under the category “Classroom Systems,” the initial administration of the EBS indicated two areas as high priorities for improvement: 1) Problem behaviors receive consistent consequences, and 2) Procedures for responding to expected and problem behaviors (in the classroom) are consistent with school-wide procedures. During the follow-up administration, both of these items were rated most frequently by staff as low priorities for improvement, indicating that staff perceived improvement in these areas. To address staff’s initial rating of these areas as a high priority for improvement, the PBS Handbook was created. The PBS handbook provided descriptions of the program-wide reward system, as well as descriptions of specific behavioral violations which were categorized behaviors as level 1 (least severe), level 2, or level 3 (most severe). Consequences that should be administered for behavior violations were specified in the handbook, based on the level of the violation. From the results of the EBS, it can be inferred that the PBS Handbook was a useful tool for staff, and that the PBS Handbook addressed staffs’ concerns. Under the category “Individual Student Systems,” the item most frequently rated as a high priority for improvement during the initial administration was “Behavior is monitored and feedback is provided regularly to the behavior support team and relevant staff.” During the follow-up assessment, 67% of staff rated this item as a low priority for improvement. This objective was addressed by initiating weekly Positive Behavior Interventions and Supports Committee meetings to review student outcomes data, plan interventions, and create specific guidelines for staff to use when scoring students’ Daily Interaction Sheets

(DIS). The weekly meetings allowed the PBIS Committee to assess the current status of existing behavior supports, and to create and implement an action plan to address areas of need identified in the EBS. Data from the use of the ASR were graphed and reviewed in each meeting, and individual behavior support plans were developed for students who were repeatedly referred to the ASR even after receiving secondary level supports (Tier 2). The PBIS committee was responsible for planning school-wide interventions, and modifying reward systems as necessary when the review of ASR and DIS data indicated that students were not making desired progress. Figure 3 depicts the results of the EBS.

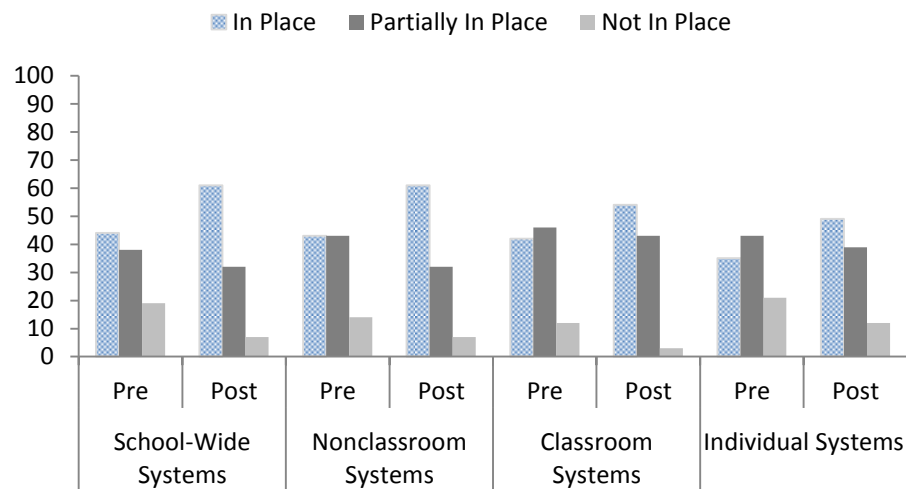


Figure 3. Mean results for staff perceptions of levels of PBS implementation (EBS).

The analysis of the EBS also included evaluating staff members' perceptions regarding priorities for improvement within the program's existing system of PBS. Descriptive statistics were used to make a comparison between staff perceptions in the fall of 2008 and the spring of 2009. Figure 4 illustrates that the number of features rated as high priorities for improvement was lower across all domains in the follow-up assessments.

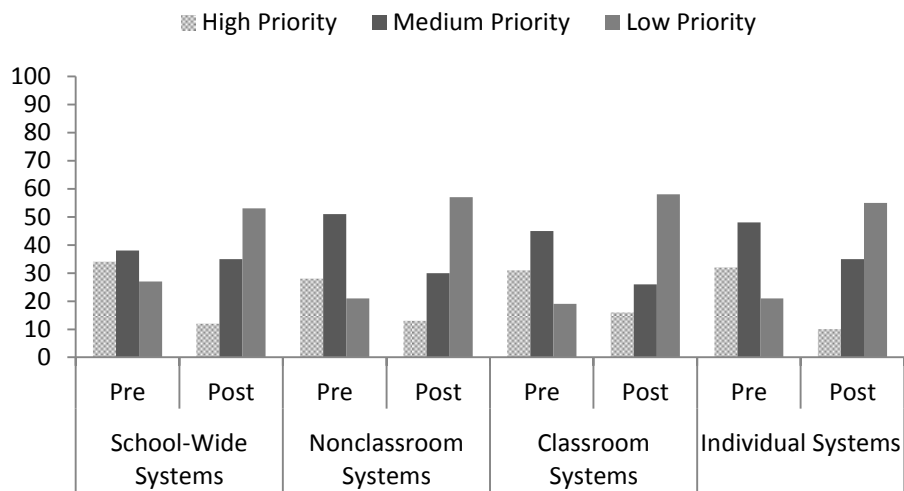


Figure 4. Mean results of staff perceptions of priorities for improvement (EBS).

### Alternate Structure Room (ASR)

The alternative structure room was used for the day treatment groups, so students from the residential treatment groups were not included in this analysis. Data were gathered on the use of the ASR (exclusionary time-out period) for the entire school year. A one-way ANOVA for repeated measures test was performed based on the use of repeated measurements with the same subjects. Data on the total occurrences of ASR referrals per group (based on students' placement in one of six day treatment groups) were recorded weekly across 39 weeks (see Figure 5).

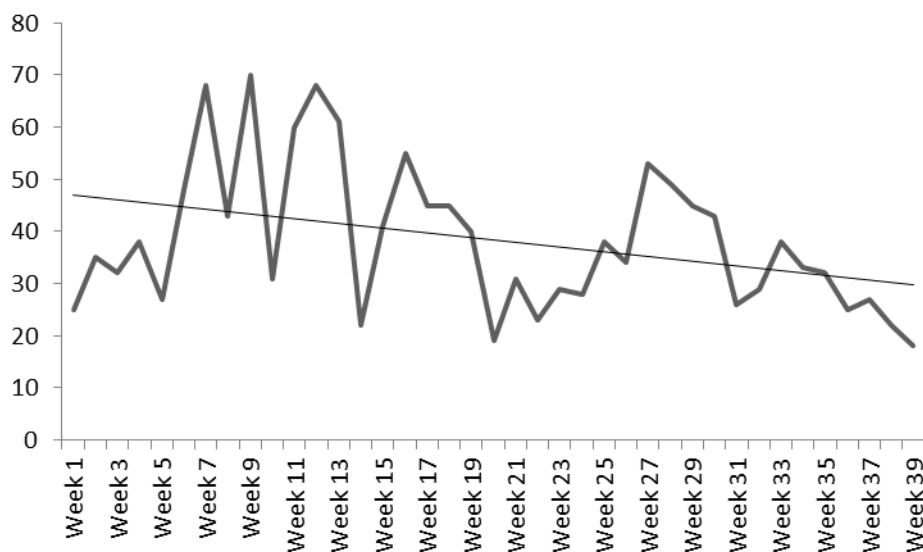


Figure 5. Number of referrals to the ASR per week.



The  $F$  critical value at 0.05 (95% confidence) for 5 degrees of freedom (numerator) and 38 degrees of freedom (denominator) is 2.46. Since the returned  $F$  value was 2.687, exceeding the critical value, the test results were significant. There was strong evidence at the 95% confidence level that the expectation values differed by group, or more plainly that we can see the effect of the point in time (which week it is) on all of the six groups measured as measured in their scores. The  $p$  value was less than .01, providing ample evidence of time-dependent improvement throughout the 39 weeks. See Table 1. The results of the One-way ANOVA indicate the use of the ASR decreased from week 1 through 39, and that the decline was statistically significant.

Table 1  
*ANOVA table for ASR data*

---

<i>Error: GROUP</i>						
	<i>Df</i>	<i>Sum Sq</i>	<i>Mean Sq</i>	<i>F value</i>	<i>Pr(&gt;F)</i>	
<i>Residuals</i>	5	513.8	102.8			
<i>Error: GROUP/WEEK</i>						
	<i>Df</i>	<i>Sum Sq</i>	<i>Mean Sq</i>	<i>F value</i>	<i>Pr(&gt;F)</i>	
V3	38	1341	35.28	2.687	5.57e-06	***
<i>Residuals</i>	190	2495	13.13			

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### Daily Interaction Sheets (DIS)

In order to assess student outcomes as they relate to the implementation of Positive Behavior Support, a comparison was made between the average percent of total points individual students earned on their DIS. The DIS were specific to the day treatment groups. Therefore, the residential treatment groups were not included in this analysis. A *t*-test for nonindependent means was used to determine if the values between October 2008 and May 2009 varied significantly. To compute this, each student's score in October was subtracted from their score in May, and this difference is considered a random variable, independent from the scores of other students. Hence, for a given student *i*,  $z_i = \text{May}_i - \text{October}_i$ . Therefore,  $z_i$  is an observed random sample from a population, where the mean  $\mu_z$  represents the average difference between a student's score on the DIS in May of 2009 and their score on the same assessment in October of 2008. It is further assumed that, given  $n = 51$  observations, that  $T = \sqrt{n} (Z - \mu_z) / S_Z$  has the Student *t* distribution on  $n-1=50$  degrees of freedom, which was justified because the underlying data are normally distributed.

A 95% confidence interval was computed for  $\mu_z$  using a two-way *t*-test for nonindependent means, equal to [2.623308 - 6.596299]. The confidence interval indicates that, given 100 classrooms, each comprised of  $n = 51$  students whose scores were captured in October 2008 and May 2009, in 95 of the 100 experimental classrooms the interval produced would contain the true population mean  $\mu_z$ . This suggested that the average score showed an improvement.

A one-tailed *t*-test was conducted, given the hypothesis  $H_0: \mu_z = 0$  and  $H_{alt}: \mu_z > 0$ . The null hypothesis of this test is that the mean of this new variable *z* should

be zero, indicating no observable change in the students' scores. The alternative hypothesis is that the mean is positive. The test was again performed with 95% confidence, and the observed significance level of the test is  $p < .01$ . This represents overwhelming statistical evidence that the null hypothesis should be rejected in favor of the alternative that  $\mu_z > 0$ . Thus, there is convincing statistical evidence that, on average, students earned a higher percentage of total points on their DIS in May 2009 than in October 2008. The box-and-whisker plot in Figure 6 displays the distributional properties of the two sets of scores for the DIS data that were analyzed.

For each item on the DIS, the student is given a score between 0-4. A score of 3 is given for meeting the expectation, and a score of 4 is given when a student's behavior exceeds the program expectations. This indicates that a student who earns 75% of the total points possible is meeting the desired expectations. The mean percentage of the total points earned increased from 44% in October 2008 to 50% in May 2009. Figure 7 depicts a histogram of the differences in score per student, showing a regular distribution with positive mean, indicating an improvement in scores.

### Student Grades

Grades were analyzed for all day treatment students who were enrolled for all four quarters of the 2008-2009 academic year. Grades for students who were only enrolled for part of the school year (e.g., students who transferred into and out of the program mid-year) were not included in this analysis. Grades were analyzed for a total of 54 students. The Friedman nonparametric test was used to determine if the distribution of students' grades varied across the four quarters of the academic year. It is a one-way,

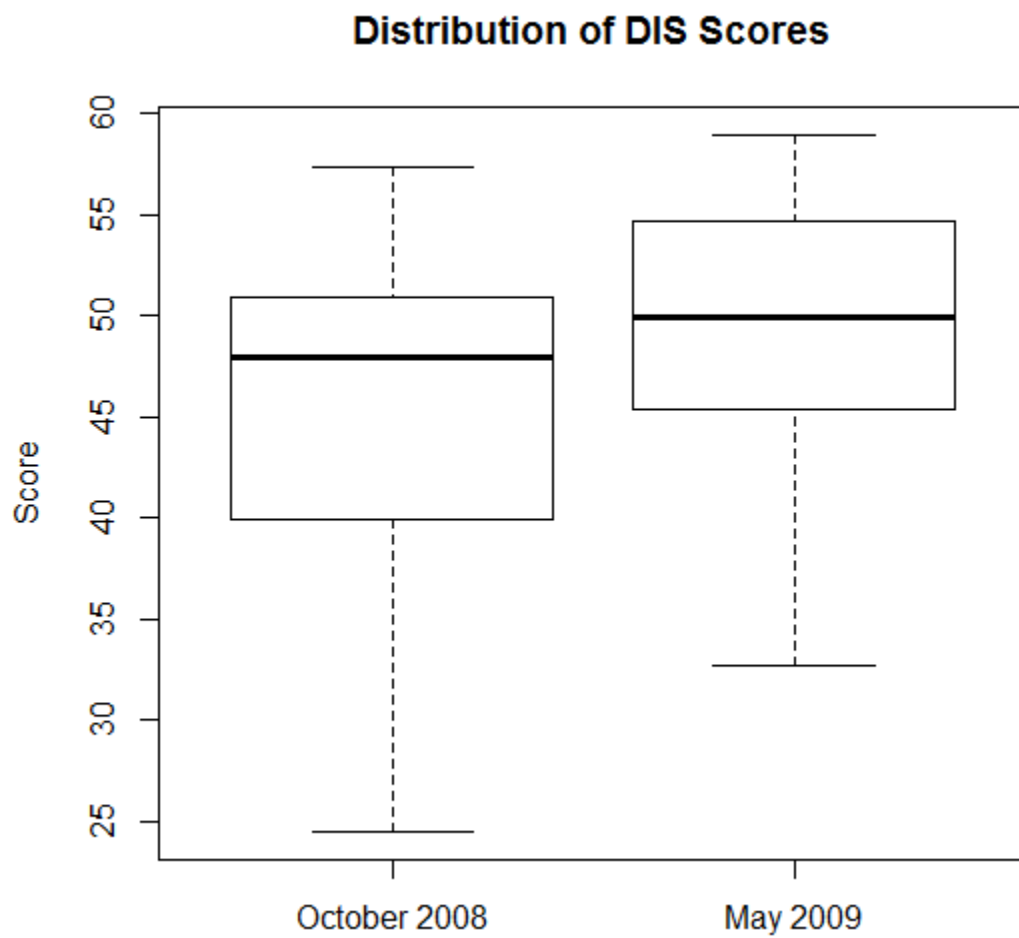


Figure 6. Distributional properties on the DIS for October 2008 and May 2009.

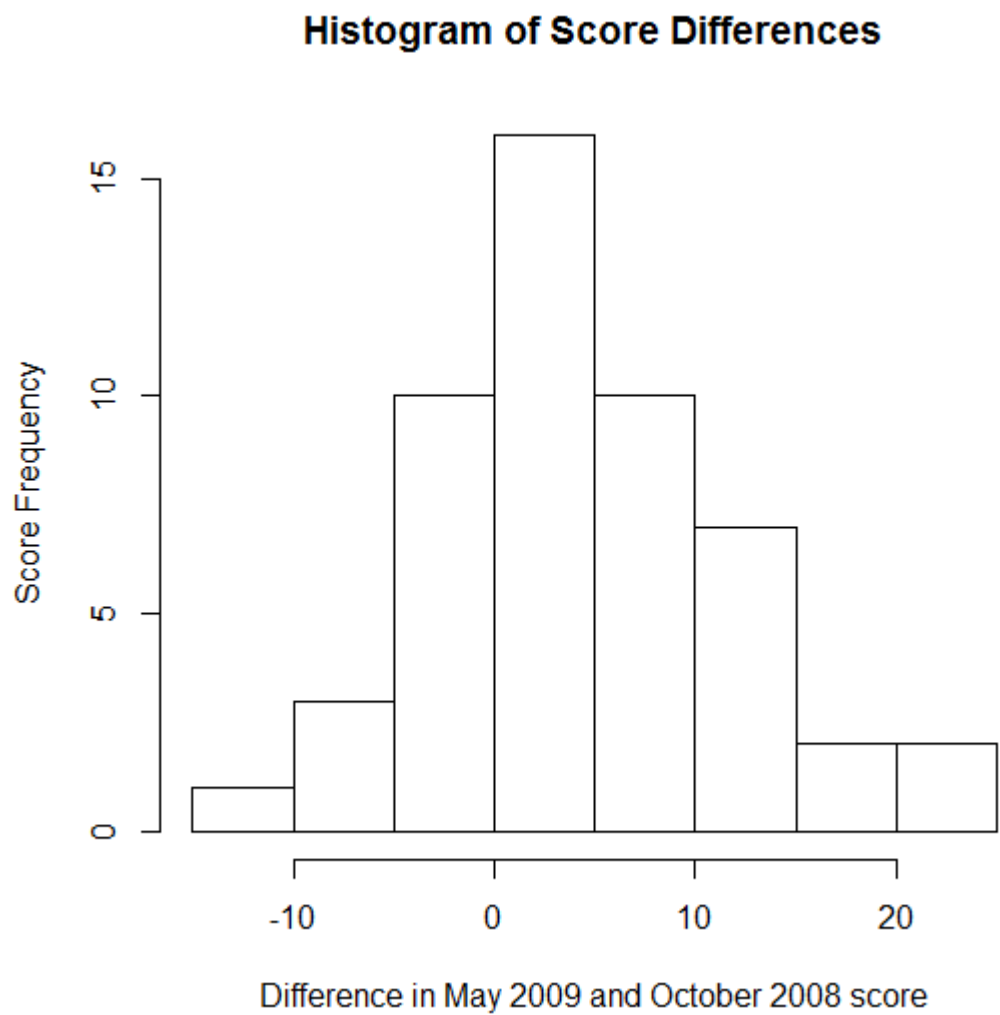


Figure 7. Differences in scores per student on the DIS.

nonparametric test of the data. The results are as follows: *Friedman chi-squared* = 5.9944,  $df = 3$ ,  $p\text{-value} > .05$ . Given that  $k = 3$  degrees of freedom (for 4 sample groups), with 54 observations (day treatment students whose grades were reported for all four quarters), the  $p$  value is not small enough, indicating that the null hypothesis cannot be rejected.

While the results of the Friedman test did not suggest significant improvement in students' grades as the academic year progressed, descriptive statistics indicated that 56% of the students whose grades were analyzed had a higher average grade point average in the last two quarters in comparison to their grade point average during the first two quarters of the academic year.

#### Youth Outcome Questionnaire Self-Report (YOQ-SR)

The YOQ-SR is a 64-item survey used to track treatment progress for individuals receiving mental health treatment. A score that exceeds 46 is considered to be in the clinical range (indicating concerns related to mental health). The reliable change index for the YOQ-SR is 13 points, meaning a student's score must decrease by a minimum of 13 points to indicate progress. A total of 29 students' YOQ-SR scores were analyzed. Data were excluded from this analysis for any student whose scores were not available for both the pre and post administrations. Across the 29 students whose scores were analyzed, there was an average decrease of -11.931 points. However, based on the reliable change index of the YOQ-SR, only 41% of the 29 students' scores decreased to an extent that would be considered clinically significant. During the initial administration of the YOQ-SR, 66% of the students had scores that fell in the clinical range (a score of

46 or higher), with a mean score of 58.14 across the group. During the post assessment, the percentage of students whose scores fell in the clinical range decreased to 38% and the group mean score was 45.24.

The Wilcoxon matched-pairs signed-ranks test was conducted to compare mean scores on the YOQ-SR from the start of the academic year with mean scores on the YOQ-SR at the end of the academic year. The Wilcoxon is a nonparametric equivalent of a paired *t*-test. There was statistical evidence that the scores decreased from September 2008 to May 2009. The result of the Wilcoxon Signed-Rank test shows that the decrease in scores on the YOQ-SR was significant ( $V = 341.5$ ,  $p < .01$ ).

### Social Validity

A Positive Behavior Supports Acceptability Questionnaire was distributed to assess the social validity of the interventions in place. The survey included seven questions that used a 5-point Likert scale, and two open-ended questions. For the first seven questions, a score of 1 equated to strong disagreement, and a score of 5 was indicative of strong agreement. A total of 20 surveys were completed by staff and analyzed. The average scores across the seven questions ranged from 3.4 to 4.4, with a total average score of 3.98 across all questions. Figure 8 illustrates the mean scores for the first seven questions on the Positive Behavior Support Effectiveness and Acceptability Questionnaire.

Of the 20 surveys that were analyzed, 14 staff responded to the open-ended questions (the same 14 staff responded to both the first and the second open-ended question). The first open ended question asked, “What did you like the most about

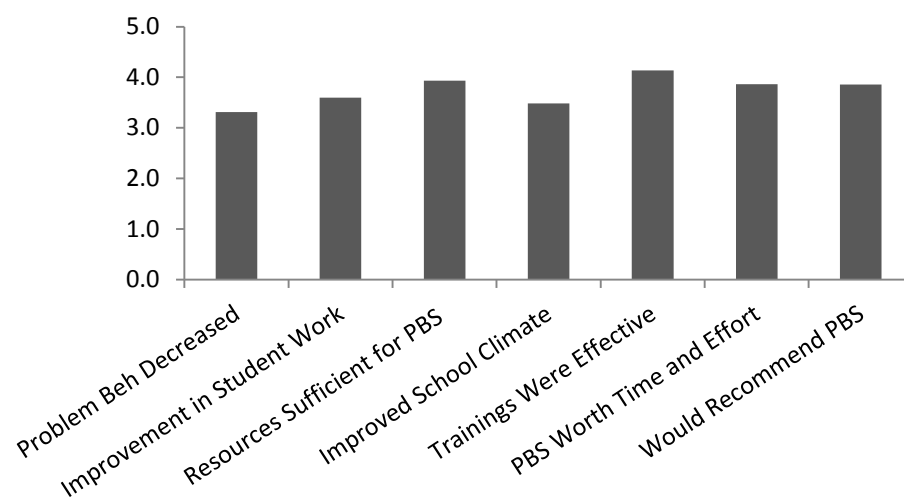


Figure 8. Mean scores for PBS Effectiveness and Acceptability Questionnaire.



implementing PBS?” The most common responses to this question indicated that maintaining consistency and uniform policies in regard to discipline was one of the most favorable outcomes of PBS. Staff commented that the guidelines for which types and frequencies of behaviors warranted various consequences was extremely beneficial in ensuring consistency among staff when students had behavioral infractions. Other frequent responses identified treating students with respect and emphasis on teaching and reinforcing appropriate social behaviors as benefits of implementing PBS, and that PBS implementation resulted in a more positive and proactive environment. The last question asked, “What would you change in regards to how Positive Behavior Support was implemented?” The most common responses to this question focused on more training, specifically prior to the start of the school year, more organized activities, and access to more resources. Other staff suggested that students would have benefitted from more frequent structured activities at the start of the school year. One staff member stated that there should be procedures established to ensure that all staff followed PBS procedures consistently and with fidelity. Another staff suggested that student outcome data (e.g., frequency of ASR, etc.) should be reviewed with all staff (versus only staff members who were part of the PBIS committee) on a monthly basis so that staff members knew which interventions were or were not effective. See Figure 8.

## CHAPTER 4

### DISCUSSION

Students are placed in alternative education for a variety of reasons. In some cases, alternative education is used as early intervention for at risk students. In other instances, an alternative placement may serve as a “last chance” for students with extreme credit deficiencies or for students whose behavior has had a significant impact on the well-being and safety of themselves and others. While the immediate goal for alternative education programs is to promote success in students, the more comprehensive objective should include developing a set of standards within the field of education that outlines effective strategies to promote academic success and to foster emotional well-being among students in alternative education. The principal investigator employed a quasi-experimental case study design to document the procedures for and effects of initiating a system of positive behavior support in an alternative education setting. The specific aims of the study were to determine whether or not PBS implementation improved during the course of the study, determine if there was a shift in staff perceptions of critical areas of need from the onset to the completion of the study, determine if improved implementation of PBS led to improved student outcomes, and evaluate staff perceptions regarding the feasibility of PBS implementation.

### Summary of Study Results

The first research question was to determine if PBS implementation improved throughout the 2008-2009 academic year. Findings indicated that PBS implementation improved substantially throughout the course of the study. The results indicated an increase from 43% to 92% of the features of PBS being fully in place (in the maintenance phase) as measured by the PET during follow-up. Improvements were documented in six of the seven areas evaluated by the PET.

The second research objective was to determine if there was a change in perceived critical areas of need within the program's system of PBS. On average, staff responses to the EBS indicated a 15.5% increase in the features of PBS that were perceived as being "in place" and staff denoted fewer features of PBS as high priorities for improvement. In the initial administration of the EBS, staff rated more features of PBS as high priorities for improvement across all four domains (school-wide systems, non-classroom systems, classroom systems, and individual supports) than during the follow-up administration. These findings suggest that program staff were more satisfied with the status of PBS implementation during the follow-up assessment, and that staff felt that the degree to which PBS was being implemented had increased. It should be noted that the EBS assesses all tiers of support, and staff responses on the EBS reflected improvements across domains.

A third objective of this study was to determine if student outcomes improved as the program's system of PBS was strengthened. With the exception of academic improvement, improvements in students' behaviors were associated with the increase in features of PBS that were implemented. That is, as PBS implementation improved,

referrals to the ASR were reduced, percentages of points earned on students' DIS increased, and students presented with improved outcomes on the YOQ-SR. To date, this is the first study to associate the implementation of PBS with improved student outcomes toward mental health treatment goals.

A Positive Behavior Support Acceptability Questionnaire was used to evaluate the social validity of PBS by staff in the alternative educational setting. The results indicated that staff felt that the trainings they received helped them gain a better understanding of objectives of PBS and enabled them to more effectively implement PBS. Staff also indicated that PBS implementation was worth their time and effort, and that benefits of PBS included increasing positive interactions with students, more focus on reinforcing students' appropriate behaviors, and increasing consistency across all teachers, counselors, and therapists when responding to students' inappropriate behaviors.

#### Comparison of Results to Related Research

The improved student outcomes associated with PBS in the current study are consistent with findings that were evidenced from the review of related research. The reduction in ASR referrals can be compared to previously documented reductions in office discipline referrals (ODRs) both in alternative settings (Farkas, et al., 2010; Kalke, Glanton, & Cristalli, 2007; Sidana, 2006) and in general education settings (Lassen, Steele, & Sailor, 2006; McCurdy, et al., 2003; Scott, 2001; Simonsen, et al., 2012; Taylor-Greene & Kartub, 2000). In addition to reductions in problem behavior, as measured by ASR data, increased adherence to program rules and engagement in prosocial behaviors were documented in the present study. The association between PBS

implementation and increases in desired behaviors among students in alternative settings is consistent with the findings in a similar case study conducted by Farkas, et al., (2010). In the study by Farkas and colleagues, students in an alternative school setting achieved higher levels of appropriate behavior after initiating a system of SWPBS than during baseline conditions. A significant reduction in office discipline referrals was documented throughout the year after the implementation of SWPBS. Students' behavior was evaluated by tracking behavior levels (i.e., students were assigned a level A, B, or C at the end of each week based on the number of points earned). Prior to PBS implementation, approximately 45% of students maintained a high behavior status (levels A and B). Following PBS implementation, 59.3% of students maintained high behavior levels. In the current study, the percentages of points students earned on their DIS were based on their adherence to program wide rules and policies. A significant increase in the percentage of points earned from the start to the end of the school year was documented. This finding is of particular importance in that suggests that as more emphasis was placed on the explicit teaching of expected behaviors, and engagement in these behaviors generated consistent reinforcement, students' engagement in prosocial behaviors increased.

In another example with findings akin to the present study, Kalke, Glanton, and Maria (2007) examined the impact of initiating a system of PBS on the use of safety holds and referrals to a support room in a day-treatment and residential facility for youth with severe emotional disturbance. A decreasing trend in both the use of safety holds and referrals to a support room were documented over a 4 ½-year period. Anecdotally, Kalke, et al., (2007) noted that one of the most important effects of PBS was the positive

environment that was created, and the renewed attitudes of hope among staff and families of the children served. These sentiments are consistent with one of the main themes that emerged from the Positive Behavior Support Acceptability Questionnaire used in the current study, in that staff felt that PBS implementation increased positive interactions with students and resulted in more emphasis on acknowledgement of students' engagement in appropriate behaviors.

In the current study, the average number of students who were referred to the ASR three or more times per week was 5.1 (4.8% of the total student population) during the first half of the year. In the second half of the year, the average number of students with three or more referrals to the ASR per week decreased to 3.4 (3.2% of the total student population). The number of students receiving three or more ASR referrals per week continued a decreasing trend through the year of PBS implementation. In the last 10 weeks of the year, the average number of students with three or more ASR referrals decreased to 3.0. Similar trends were documented for students who received one referral per week (a reduction from an average of 13.9 students per week in the first half of the year to an average of 10.8 students per week in the second half of the year) and for students who were referred to the ASR two times per week (a reduction from an average of 5.9 students per week during the first half of the year to an average of 4.9 students per week in the second half of the year). If students who were referred to the ASR three or more times per week were considered those in need of individual interventions (Tier 3), and student with one to two referrals per week were provided targeted, group interventions (Tier 2), the conclusion could be made that SWPBS was effective for 82% of the total student population, 14.8% of students would have benefitted from targeted

small group interventions (Tier 2), and 3.2% of the total student population required individual interventions based on functional behavior assessment.

The findings in this study are consistent with other examinations of PBS in that not all students respond to program-wide (or school-wide) interventions (Scott, et al., 2002; Simonsen, et al., 2010; Vincent & Tobin, 2011). Evaluations of PBS in typical education settings have indicated that school-wide, or Tier 1 interventions are effective in preventing and reducing behavioral infractions in approximately 80% of students (Walker, et al., 1996). Similarly, Simonsen, et al., (2010) found that after implementing universal SWPBS in an alternative setting, 83% of students were responsive to the preventative measures (i.e., students with zero behavioral incidents involving physical aggression per month), and the remaining 17% of students required more intensive interventions. In the weekly reviews of ASR data, it became apparent that the majority of referrals to the ASR were accumulated by a small number of students with multiple referrals per week. The specific students who had multiple referrals per week remained consistent across weeks, and it was this group of students for whom more intensive interventions and supports were recommended. In a study conducted by Swoszowski, Jolivet, Fredrick, and Heflin (2012), a secondary (Tier 2) intervention was implemented for students with Emotional and Behavioral Disorders (E/BD) in a residential facility. Six students who failed to respond to universal positive behavior support (Tier 1) were selected to participate in a Check In/Check Out (CICO) intervention. Of these six students, functional behavior assessments were conducted and revealed that three students' problem behavior was maintained by adult attention, and three students' problem behavior was maintained by escape. Four of the six students responded

positively to the CICO intervention, demonstrating a reduction in the intervals during which problem behavior was observed. While previous research on CICO interventions have suggested effectiveness for students with attention-maintained problem behavior (McIntosh, Campbell, Carter, & Dickey, 2009), the results of the study conducted by Swoszowski, et al., (2012) revealed that the CICO intervention was equally effective for students with escape-maintained problem behavior (CICO was effective for two of three students with attention-maintained problem behavior and for two of three students with escape-maintained problem behavior). In the current study, PBS implementation was in the early phase (year 1), and Tier 2 and Tier 3 interventions had not yet been fully implemented. The students who continued to have frequent referrals to the ASR may have benefitted from a Tier 2 intervention such as CICO.

The majority of studies available that have evaluated PBS in nontraditional school settings have focused on Tier 1 (SWPBS) interventions (Farkas, et al., 2012; Sidana, 2006; Simonsen, Britton, & Young, 2010). While documentation of the benefits of school-wide PBS in alternative settings is beginning to emerge in current literature, examination of the three-tier model (i.e., primary, secondary, and tertiary interventions) has yet to be thoroughly investigated as it relates to alternative education settings. There is one report available (Simonsen, Jeffrey-Pearsall, & Sugai, 2011) that makes recommendations for applying the three-tiered model of PBS to alternative settings (including day treatment, residential, juvenile correctional, and hospital settings). Simonsen, et al., (2011) suggest that based on the population frequently served in alternative education (e.g., programs for students with emotional and behavioral disorders, programs for students who were suspended or expelled from a typical school



placement), Tier 1 interventions may be more intensive in alternative settings than in typical school settings. The structure of the program in the present study is consistent with this postulation in that students benefited from small class sizes (i.e., 10-15 students per class) and a highly structured environment. Regardless, some students continued to exhibit chronic problem behavior and were frequently referred to the ASR. Simonsen and colleagues recommended that data are used to identify alternative education students who exhibit maladaptive behaviors that are resistant to Tier 1 interventions, and that in the same manner as typical education settings, a continuum of Tier 2 (targeted) and Tier 3 (individual) supports is appropriate in alternative settings.

In a general education setting, Lassen, et al., (2006) documented a reduction in the mean ODR's per student from 5.22 per student during baseline to 3.70 per student during the 3<sup>rd</sup> year among an urban middle school population. The results of this study were particularly notable given that there was an increase in ODRs from baseline to year 1 (a mean of 5.22 per student to 6.84 per student). In the study conducted by Lassen and colleagues, academic achievement was also used as an outcome measure. While the current study used student grades as a measure of academic performance, Lassen and colleagues used standardized test scores in the areas of reading and math. In the current study, there were no significant improvements documented in grades from the beginning of the school year to the end of the school year. With regard to standardized test scores for reading, the results of the study by Lassen et al., (2006) did not reveal statistically significant improvement in reading scores from baseline to the third year. However, there was a decrease in scores from baseline to year 1, and the results did indicate statistically significant improvements when reading test scores from year 1 were compared to reading

test scores from year 3. There were statistically significant improvements documented in standardized math test scores. Lassen and colleagues contended that the amount of instructional time saved by reducing the ODRs should promote better academic success. Regression analyses conducted by Lassen, et al., (2006) indicated that the number of ODRs per student was an effective predictor of standardized test scores. That is to say, students with fewer ODRs had higher scores on standardized tests. The current study used grade point averages as an indicator of academic achievement rather than standardized test scores. It is possible that standardized test scores are a better indicator of academic improvement than grade point average, because standardized test scores may provide a more valid measure of academic achievement than grades. A multitude of factors can influence students' grades, such as students failing to turn in assignments, teacher perceptions, and grading procedures. Additionally, a student may progress in several academic subject areas, but receive a low grade in a few subjects, resulting in a lower grade point average even if progress was made in other subject areas.

The review of research yielded one study with results that were somewhat contradictory to the findings of the current report. Vincent and Tobin (2011) conducted a study in which four objectives were addressed: 1) was on-going SWPBS implementation associated with decreased exclusion rates among students? 2) if exclusion rates decreased, which domain of SWPBS implementation (i.e., school-wide, classroom, nonclassroom, and individual) was associated with those reductions? 3) in schools that were engaged in on-going SWPBS implementation and had lowered exclusion rates, were overall exclusions and long-term exclusions proportionately distributed across students from all ethnicities? and 4) were long-term exclusions of students with disabilities

equally distributed across students from all ethnicities in schools engaged in on-going SWPBS implementation? A total of 77 schools were analyzed, including 38 elementary schools, 23 middle schools, 7 high schools, 4 K-8/12 schools, and 5 alternative schools. SWPBS implementation was only associated with a substantial reduction in school exclusions among the K-8/12 schools. Interestingly, SWPBS implementation was associated with an increase in school exclusions among the five alternative schools. There were also documented differences in the domain of SWPBS implementation that benefitted students according to grade level. Among elementary students, improving classroom systems of support was associated with reductions in school exclusions. In high school settings, improvement of the nonclassroom systems had a more significant impact. Findings also indicated that of the students excluded from school, a disproportionate number of the students were of African American descent. Thirty-six of the 77 schools had lower exclusion rates at Time 2 in comparison to Time 1. Among the schools that showed reductions in exclusion rates, increased scores were documented in all categories of the EBS. While the results obtained by Vincent and Tobin (2011) are not without limitations, these findings suggest that there may be culturally different responses to PBS implementation, and that continued research is needed to determine how to best implement PBS given the ethnic make-up of students.

In a study conducted at the Illinois Youth Center (IYC) by Sidana (2006), a 1-day PBS training was provided for all staff, after which staff voted on whether or not they would like to implement PBS. Consistent with the findings of the current study, staff displayed favorable attitudes toward PBS implementation. The results of the current study revealed that staff had positive impressions of PBS as a whole, and reported

positive attitudes regarding the content and the quality of the trainings they received. The trainings provided a strong rationale for PBS implementation. However staff noted that they would have preferred to receive training prior to being required to implement PBS procedures. Staff felt and that being trained at the start of the academic year would have increased their buy-in and willingness to put forth more effort during the early stages of PBS, in order to access the benefits to students and more positive program milieu.

The positive impacts of PBS documented in previous studies (Farkas et al., 2012; Kalke et al., 2007; Sidana, 2006; Simonsen et al., 2010), and in the current study all lend credence to the contention that PBS implementation in alternative settings leads to desired outcomes both on severe behavioral infractions (e.g., reductions to ODRs, serious incidents, safety holds, and ASR referrals) and in increasing expected student behaviors (i.e., higher behavior levels and more points earned on students DISs).

### Implications for Practice

The results of this study have important implications regarding the implementation of PBS in alternative educational settings. A common theme of the results of Positive Behavior Support Acceptability Questionnaire was that staff found the trainings provided on PBS to be extremely beneficial in outlining the key elements of PBS, building consistency among all program staff, and reviewing research related to populations that have benefitted from PBS. Staff reported that the trainings increased their abilities to implement interventions with fidelity. However, staff indicated that more intensive training prior to initiating PBS interventions with students would have been more effective. Alternative education programs that seek to initiate a system of PBS

should place heavy emphasis on providing quality staff training, specifically prior to implementing PBS. For example, when PBS was implemented at the IYC (Sidana, 2006) planning took place over a 5-month period prior to beginning to implement PBS, during which time program-wide expectations were defined and teachers determined how these expectations would be met within their individual classrooms. After the 5-month planning period, students were introduced to the behavioral expectations and PBS interventions during a 1-week introduction.

After initiating PBS, it is imperative that follow-up staff trainings and opportunities for all staff collaboration are provided on an on-going basis. Additionally, the student population within a given school year is likely to be highly variable in alternative school settings. In traditional school programs that implement PBS, all students are trained on the school-wide rules at the start of the school year. In alternative settings, follow-up trainings for students should occur frequently throughout the year to account for students who transition into the program throughout the year.

Students in alternative school settings frequently have a variety of risk factors, such as the presence of mental health diagnoses or disability, unstable home environments, low socio-economic status, history of school failure, teen pregnancy, substance abuse, and involvement in the juvenile justice system. The presence of risk factors, and how these factors are likely to influence a student's responsiveness to PBS, requires serious consideration. These risk factors undoubtedly influence students' sense of self-worth, and may make students less likely to benefit from universal prevention measures. Understanding the needs of these students on an in-depth level will allow educators and mental health professionals to develop comprehensive interventions to

address all risk factors (academic and social-emotional risk factors). Students who do not respond to program-wide supports should be provided additional supports at the secondary and tertiary level. For students who require individual interventions, behavior support plans should be created based on functional assessment of behavior. Data for target behaviors should be collected and reviewed on an on-going basis to ensure that the function of the target behavior was accurately identified and that the interventions are effective. Criteria for fading intensive interventions (e.g., meeting goals for the reduction of maladaptive behaviors and obtaining goals for increasing prosocial behaviors and academic success) should be established, so that resources are allocated in the most efficient manner. In 1995, Cox, Davidson, and Bynum conducted a meta-analytic study of delinquency-related outcomes of alternative education programs. One important finding from that study was that alternative education programs that are geared toward a specific target population (e.g., students experiencing academic failure, delinquent youth) produced larger effects than those programs that served a more heterogeneous population of students. Alternative education programs that are tailored for a specific type of student allow for developing curriculums and program structure that are adapted to match the specific needs of the population.

The procedures used in this study can be replicated in other similar alternative education programs. The steps taken to implement PBS in the current study included: (a) the initial implementation of the PET and EBS in order to create an action plan, (b) initiating weekly meetings by the PBIS team, (c) conducting all-staff trainings on the primary tenants of PBS and on interventions specific to the program, (d) strengthening the existing system of program-wide reinforcement, (e) increasing direct teaching of the

five program-wide rules, including holding an assembly and small group sessions to teach and practice program-wide rules, (f) creating a program handbook that described all levels of behavior violations and appropriate consequences based on the level of the violation, and (g) reviewing outcome data on a weekly basis and using the outcome data as a basis for implementing new interventions or modifying current interventions.

The results of this study did not indicate that students' grades improved to a degree that was statistically significant. Kleiner, Porch, and Farris (2002) indicated that throughout the nation, 12% of the students enrolled in alternative education programs have disabilities and Individual Education Programs (IEPs). In the United States the range of elementary, middle school, and high school students with disabilities enrolled in alternative education programs is 3-20%, with up to an additional 50% of students having emotional or behavioral disorders (Foley & Pang, 2006; Gaylord, Johnson, Lehr, Bremer, & Hasazi, 2004; National Center for Education Statistics, 2001 ). State specific data have shown up to 60% of students enrolled in alternative programs to have IEPs. To date, literature on special education services in alternative schools is limited (Simonsen, et al., 2011). In the current study, the program did not require teachers to have special education credentials. However, three of the seven teachers were certified in special education. Due to the high percentages of alternative education students with Individualized Education Programs, it is recommended that strong consideration be given to how to best support alternative education students in achieving academic success and progress toward IEP goals that were established prior to a student transitioning to an alternative school placement. Procedures should be implemented to ensure good communication between the prior placement and the receiving teachers when students with IEPs transition into

alternative education programs. Due to the multitude of internal and external factors that can impact students' grades (e.g., learning disabilities, quality of Special Education Services in Alternative Education settings, parental involvement, second language learner), grades may not be an appropriate outcome measure when evaluating PBS.

### Directions for Future Research

The current student evaluated the effects of implementing universal PBS in an alternative education study. It was beyond the scope of this study to implement and evaluate Tier 2 and Tier 3 interventions for students' whose problem behavior was resistant to the universal prevention program. While there is a growing body of research that has evaluated Tier 2 and Tier 3 interventions in traditional school settings (Hawken & Horner, 2003; McIntosh, et al., 2009), additional research is needed to determine how students in alternative education settings respond to targeted and individual behavioral interventions, including studies that employ larger sample sizes. Future research on targeted and individual interventions in residential settings should evaluate interventions that are extended beyond the school day to incorporate all settings (e.g., morning routines before the school day begins, chores, hygiene routines, and nonschool days) to determine the effectiveness of PBS across all activities within a residential setting. More in-depth research is needed to determine the interaction between mental health diagnoses and response to PBS in alternative school settings. For students with serious mental health issues, intensive, individualized support may be necessary immediately upon entering alternative school placements. Future research should identify characteristics that make response to universal prevention unlikely, so that these students can be provided effective



interventions immediately, rather than waiting for these students to fail, and then identifying the need for more intensive interventions.

To date, there are no studies available that compare the rate of successful student transitions from alternate education programs to traditional education programs for students who were and were not exposed to PBS in the alternative education setting. There is one report available (Cox, 1999) that compared two groups of delinquent middle school students (an experimental group of students participated in an alternative education program for a semester, and a control group of students who remained in a traditional middle school setting) and included follow-up data a year after students participated in an alternative education program. The goal of the alternative education program was to decrease delinquent activities by providing a positive school experience. In this study, the students in the experimental group did not differ from the students in the control group when the initial data were collected, prior to attending the alternative education program, across six outcome measures. The outcome measures included 1) school attitude, 2) self-esteem, 3) self-reported delinquency, 4) grade point average, 5) standardized test scores in reading and math, and 6) absenteeism. Data on all six outcome measures were collected prior to the experimental group of students attending the alternative school program, at the completion of the alternative school program, and 1 year after completion of the program. Students who participated in the alternative education program showed significant improvement in self-esteem, had higher grade-point averages, and fewer absences at the post-program follow-up, but these improvements were not maintained at the 1-year follow-up. Cox suggests that the rigid structure and larger class sizes in the traditional school setting contributed to the students'

regression upon returning to the traditional school setting. Future research is necessary to evaluate whether or not the implementation of PBS in alternative educational settings promotes success among students as they transition from alternative educational settings to traditional educational settings.

Future research should also be conducted to examine the extent to which improved student outcomes following PBS implementation are maintained across multiple school years. Given that this study evaluated only one alternative education program across 1 academic year, additional research should be conducted on a broader scale to determine if findings are consistent across various types of alternative education programs and the degree to which treatment gains are maintained across multiple years.

One aim of alternative education programs is to increase the likelihood that students remain in school through high school graduation. The presence of a disability increases the probability that a student will fail to complete high school by 50% (Blackorby & Wagner, 1996; Thurlow, Sinclair, & Johnson, 2002). Future studies should investigate the percentages of students in alternative education with and without disabilities who obtain high school diplomas, and whether or not there is a relationship between PBS and increasing the likelihood that students in alternative education obtain high school diplomas. Research is needed to establish a set of criteria regarding programmatic features that increase the probability of alternative education students, especially those with disabilities, remaining in school through high school graduation. In the current study, the implementation of PBS did not result in a positive impact on students' grades. Additional research is needed to examine the barriers to academic success in alternative education setting, and to determine what types of interventions are

needed to promote academic success in a nontraditional school setting.

As the number and type of alternative education programs continues to grow, future research should continue to focus on providing documentation of the effectiveness of alternative education programs, based on the intended purpose of the program (i.e., serving as an interim program for students who were suspended or expelled, programs for students who were required to attend an alternative school due to disruptive behavior, voluntary programs for students with unique learning needs). Program evaluation should include a range of outcome measures, including but not limited to academic success, student attitudes toward school, school climate, graduation rates, transition back to traditional education settings, and students' motivation and self-esteem.

#### Limitations of Current Study

The results of this study should be interpreted with consideration to a number of limitations. The term "alternative education settings" encompasses a broad range of settings, including but not limited to programs housed within traditional schools, programs housed in separate facilities, day-treatment programs, and residential programs. One limitation of this study was the use of a quasi-experimental, case study design. The significance of the results would have been bolstered by the use of an experimental design comparing multiple similar alternative education programs where PBS was and was not implemented. The design used for this study left several questions unanswered. For example, were improvements in student outcomes due to the passage of time and increased student maturity, and would gains have been observed without exposure to PBS? If so, would students exposed to PBS improve to a greater degree than students

who were not exposed to PBS? Additionally, although it was not one of the aims of this study, specific characteristics of students who did and did not respond to universal prevention measures were not addressed in the present study. According to Florida's Positive Behavior Support Project website, it may take up to a year to fully implement all features of PBS. While there was documented improvement in the implementation of PBS in the present study, given that the study examined only the 1<sup>st</sup> year of PBS implementation, there was not sufficient time to evaluate individual student characteristics that contributed to or prevented students from responding to program-wide PBS. A limitation inherent to the design of this study is the inability to generalize the findings to the greater population of students served in alternative education, due to the small sample size and the inclusion of only one alternative education program.

Additionally, this study included the use of self-report data (i.e., EBS) to evaluate staff perceptions regarding critical areas of PBS in need of improvement and the feasibility of PBS implementation. The lack of a validated external measure of the fidelity of PBS implementation compromised the integrity of the present findings. Of the surveys distributed to staff, approximately 47% were returned. It was not possible to evaluate the perceptions of staff who failed to complete and return surveys during both initial and follow-up assessments. It is possible that the results may have varied if a higher percentage of staff returned both pre and post surveys.

In a study conducted by Farkas, et al., (2012), fidelity of PBS implementation was assessed by observations of School-wide Positive Behavior Support (SWPBS) lessons, conducted by a behavior management specialist. The behavior management specialist rated the degree to which teachers presented lessons as intended. Additionally, a survey

was completed for both teachers and students to complete following SWPBS lessons. The teachers rated the degree to which the lesson engaged the students. The student survey required the students to identify objectives of the lesson. While this study used the PET to determine the extent to which PBS was being implemented on a broad level, and the principal investigator conducted classroom observations on a weekly basis (rotating through classrooms), there were no on-going evaluations in place to ensure that individual teachers were following prescribed interventions with fidelity across time (e.g., maintaining appropriate ratios of positive to corrective feedback, reviewing program-wide rules on a daily basis, regularly rewarding student for meeting program-wide expectation).

Lastly, there were certain aspects of internal validity that were not easily controlled. It is possible that students were exposed to other interventions that were not part of the alternative education program (e.g., private therapy or counseling) and other interventions that students received simultaneous to PBS implementation impacted students' outcomes. The use of medication could also present a threat to the internal validity of this study. The percentage of students who received medication was not accounted for, nor was potential medication changes during the study taken into consideration. Additionally, alternative education settings have high student mobility. Students entering or exiting the program may have impacted student outcome measures such as ASR data.

## Conclusion

Effective practices in alternative education have been defined as (a) those that are effective for students who are at risk, (b) practical for implementation in a school setting, and (c) capable of producing convincing positive student outcomes (Flower, McDaniel, & Jolivette, 2011). The findings of the current study should be interpreted with consideration of the lack of experimental procedures. However, the current study adds to the small body of existing research documenting positive student outcomes as well as improved school or program climates in alternative settings that have implemented PBS. Based on the studies available, PBS has been associated with positive outcomes for students in alternative education settings and should be considered a viable option for reducing problem behaviors and increasing prosocial behaviors.

## APPENDIX A

### PROGRAM-WIDE EVALUATION TOOL

## **Program-wide Evaluation Tool (PET)**

### **Overview**

#### Purpose of the PET

The Program-wide Evaluation Tool (PET) is designed to assess and evaluate the critical features of Program-wide positive behavior support across each setting in a program. The PET results are used to:

1. assess features that are in place,
2. determine annual goals for program-wide positive behavior support,
3. evaluate on-going efforts toward program-wide behavior support,
4. design and revise procedures as needed, and
5. compare efforts toward program-wide positive behavior support from year to year.

Information necessary for this assessment tool is gathered through multiple sources including review of permanent products, observations, and staff (minimum of 10) and youth (minimum of 15) interviews or surveys. There are multiple steps for gathering all of the necessary information. The first step is to identify someone in the program as the contact person. This person will be asked to collect each of the available products listed below and to identify a time for the PET data collector to preview the products and set up observations and interview/survey opportunities. Once the process for collecting the necessary data is established, reviewing the data and scoring the PET averages takes two to three hours.



**Products to Collect**

- |          |                                                                           |
|----------|---------------------------------------------------------------------------|
| 1. _____ | Discipline handbook                                                       |
| 2. _____ | Program improvement plan goals (Where applicable)                         |
| 3. _____ | <i>Annual Action Plan for meeting program-wide behavior support goals</i> |
| 4. _____ | Social skills instructional materials/ implementation time line           |
| 5. _____ | Behavioral incident summaries or reports                                  |
| 6. _____ | Behavior incident form(s)                                                 |
| 7. _____ | Other related information                                                 |

**Using PET Results**

The results of PET will provide teams with a measure of the proportion of features that are 1) not targeted or started, 2) in the planning phase, and 3) in the implementation/ maintenance phases of development toward a systems approach to program-wide positive behavior support. The PET is designed provide trend lines of improvement and sustainability over time.

**Program-wide Evaluation Tool (PET)  
Implementation Guide**

**Name of Facility**

\_\_\_\_\_

**City**

\_\_\_\_\_

**Date** \_\_\_\_\_

**State** \_\_\_\_\_

**Step 1: Make Initial Contact**

- A. Identify program contact person & give overview of PET page with the list of products needed.
- B. Ask when they may be able to have the products gathered. Approximate date: \_\_\_\_\_
- C. Get names, phone #'s, email address & record below.

Name \_\_\_\_\_ Phone \_\_\_\_\_

Email \_\_\_\_\_

**Products to Collect**

- 1. \_\_\_\_\_ Discipline handbook
- 2. \_\_\_\_\_ Program improvement plan goals
- 3. \_\_\_\_\_ Annual Action Plan for meeting program-wide behavior support goals
- 4. \_\_\_\_\_ Social skills instructional materials/ implementation time line
- 5. \_\_\_\_\_ Behavioral incident summaries or reports
- 6. \_\_\_\_\_ Behavior incident form(s)
- 7. \_\_\_\_\_ Other related information

**Step 2: Confirm the Date to Conduct the PET**

- A. Confirm meeting date with the contact person for conducting an administrator interview, taking a tour of the school while conducting youth & staff interviews, & for reviewing the products.  
Meeting date & time: \_\_\_\_\_

**Step 3: Conduct the PET**

- A. Conduct administrator interview.
- B. Tour program to conduct observations of posted school rules & randomly selected staff (minimum of 10) and youth (minimum of 15) interviews.
- C. Review products & score PET.

**Step 4: Summarize and Report the Results**

- A. Summarize surveys & complete PET scoring.
- B. Update program graph.
- C. Meet with team to review results.  
Meeting date & time: \_\_\_\_\_

## Program-wide Evaluation Tool (PET) Scoring Guide

Program \_\_\_\_\_ Date \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_

Pre \_\_\_\_\_ Post \_\_\_\_\_ PET data collector \_\_\_\_\_

Feature	Evaluation Question	Data Source (circle sources used) P= product; I= interview; O= observation	Score: 0-2
<b>A. Expectation Defined</b>	1. Is there documentation that staff has agreed to 5 or fewer positively stated program rules/ behavioral expectations? (0=no, 1= too many/negatively focused, 2 = yes)  <u>Rules:</u>	Discipline handbook <b>P</b> Instructional materials Other _____	
	2. Are the agreed upon rules & expectations publicly posted in 8 of 10 locations? (See interview & observation form for selection of locations). ( 0= 0-4, 1= 5-7, 2= 8-10)	Wall posters <b>O</b> Other _____	
<b>B. Behavioral Expectation Taught</b>	1. Is there a documented system for teaching behavioral expectations to youths on an ongoing basis? (0= no, 1 = states that teaching will occur, 2= yes)	Lesson plan books <b>P</b> Instructional materials Other _____	
	2. Do 90% of the staff asked state that teaching of behavioral expectations to youths has occurred? (0= 0-50%, 1= 51-89%, 2=90%-100%)	Interviews <b>I</b> Other _____	
	3. Do 90% of team members asked state that the program has been taught/reviewed with staff on an ongoing basis? (0= 0-50%, 1= 51-89%, 2=90%-100%)	Interviews <b>I</b> Other _____	
	4. Can at least 70% of 15 or more youths state 67% of the program's rules? (0= 0-50%, 1= 51-69%, 2= 70-100%)	Interviews <b>I</b> Other _____	
	5. Can 90% or more of the staff asked list 67% of the program's rules? (0= 0-50%, 1= 51-89%, 2=90%-100%)	Interviews <b>I</b> Other _____	
<b>C. On-going System for Rewarding Behavioral</b>	1. Is there a documented system for rewarding youth behavior? (0= no, 1= states to acknowledge, but not how, 2= yes)	Instructional materials <b>P</b> Lesson Plans; Interviews Other _____	
	2. Do 50% or more youths asked indicate they have received a reward (other than	Interviews <b>I</b> Other _____	

<b>Feature</b>	<b>Evaluation Question</b>	<b>Data Source</b> (circle sources used) <b>P= product; I= interview;</b> <b>O= observation</b>	<b>Score:</b> <b>0-2</b>
<b>Expectation</b>	verbal praise) for expected behaviors over the past two months? (0= 0-25%, 1= 26-49%, 2= 50-100%)		
	3. Do 90% of staff asked indicate they have delivered a reward (other than verbal praise) to youths for expected behavior over the past two months? (0= 0-50%, 1= 51-89%, 2= 90-100%)	Interviews <b>I</b> Other _____	
<b>D. System for Responding to Behavioral Violations</b>	1. Is there a documented system for dealing with and reporting specific behavioral violations? ( 0= no, 1= states to document, but not how, and 2 = yes)	Discipline handbook <b>P</b> Instructional materials Other _____	
	2. Do 90% of staff asked agree with administration on what problems are office-managed and what problems are classroom-managed? (0= 0-50%, 1= 51-89%, 2= 90-100%)	Interviews <b>I</b> Other _____	
	3. Is there a documented crisis plan for responding to extreme dangerous situations and do all staff know this plan? (0= 0-3, 1= 4-5, 2= 6-7)	Walls <b>P</b> Other _____ <b>I</b>	
	4. Do 90% of staff asked agree with administration on the procedure for handling extreme emergencies (physical attacks on youth or staff)? (0= 0-50%, 1= 51-89%, 2= 90-100%)	Interviews <b>I</b> Other _____	
<b>E. Monitoring &amp; Decision-Making</b>	1. Does the behavior incident form list (a) youth name, (b) date, (c) time, (d) referring staff, (e) problem behavior, (f) location, (g) persons involved, (h) probable motivation, & (i) administrative decision? (0=0-3 items, 1= 4-6 items, 2= 7-9 items)	Referral form <b>P</b> (circle items present on the referral form)	
	2. Can the administrator clearly define a system for collecting & summarizing behavior incident reports (computer software, data entry time)? (0=no, 1= referrals are collected, 2= yes)	Interview <b>I</b> Other _____	
	3. Does the administrator report that the team provides behavior data summary reports to the staff at least three times/year? (0= no, 1= 1-2 times/yr., 2= 3 or more times/yr)	Interview <b>I</b> Other _____	
	4. Do 90% of team members asked report that behavior data are used for making decisions in designing, implementing, and revising Program-wide effective behavior support efforts? (0= 0-50%, 1= 51-89%, 2= 90-100%)	Interviews <b>I</b> Other _____	

Feature	Evaluation Question	Data Source (circle sources used) P= product; I= interview; O= observation	Score: 0-2		
<b>F. Management</b>	1. Does the program improvement plan list improving behavior support systems as one of the top 3 program improvement plan goals? (0= no, 1= 4 <sup>th</sup> or higher, 2 = yes)	Program Improvement Plan, <b>P</b> Interview Other _____ <b>I</b>			
	2. Can 90% of staff asked report that there is a program-wide team established to address behavior support systems in the program? (0= 0-50%, 1= 51-89%, 2= 90-100%)	Interviews <b>I</b> Other _____			
	3. Does the administrator report that team membership includes representation of all staff? (0= no, 2= yes)	Interview <b>I</b> Other _____			
	4. Can 90% of team members asked identify the team leader? (0= 0-50%, 1= 51-89%, 2= 90-100%)	Interview <b>I</b> Other _____			
	5. Is the administrator an active member of the program-wide behavior support team? (0= no, 1= yes, but not consistently, 2 = yes)	Interview <b>I</b> Other _____			
	6. Does the administrator report that team meetings occur at least monthly? (0=no team meeting, 1=less often than monthly, 2= at least monthly)	Interview <b>I</b> Other _____			
	7. Does the administrator report that the team reports progress to the staff at least four times per year? (0=no, 1= less than 4 times per year, 2= yes)	Interview <b>I</b> Other _____			
	8. Does the team have an action plan with specific goals that is less than one year old? (0=no, 2=yes)	Annual Plan, calendar <b>P</b> Other _____			
<b>G. District-Level Support</b>	1. Does the program budget contain an allocated amount of money for building and maintaining program-wide behavioral support? (0= no, 2= yes)	Interview <b>I</b> Other _____			
	2. Can the administrator identify an out-of-program liaison in the district or state? (0= no, 2=yes)	Interviews <b>I</b> Other _____			
<b>Summary Scores:</b>	A = /4	B = /10	C = /6	D = /8	E = /8
	F = /16	G = /4	Mean = /7		

School-wide Evaluation Tool version 2.0, November 2001

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Educational and Community Supports

University of Oregon

### PET Administrator Interview Questions

#### ***Let's talk about your discipline system***

- 1) Do you collect and summarize behavior incident information? Yes  
No If no, skip to #5.
- 2) What information do you use for collecting behavior incident reports? (E 2)
  - a) What data are collected? \_\_\_\_\_
  - b) Who collects the data? \_\_\_\_\_
- 3) What do you do with the behavior incident report information? (E2)
  - a) Who looks at the data? \_\_\_\_\_
  - b) How often do you share it with other staff and whom do you share it with? \_\_\_\_\_
- 4) What type of problems do you expect staff to refer to the administration rather than handling in the classroom/ specific setting? (D2)
- 5) What is the procedure for handling extreme emergencies in the building (i.e. stranger in building with a gun/ serious fight? (D4)

#### ***Let's talk about your Program rules or motto***

- 6) Do you have program rules or motto? Yes No If no, skip to # 10.
- 7) How many are there? \_\_\_\_\_
- 8) What are the rules/motto? (B5)
- 9) What are they called? (B2, B4)
- 10) Do you acknowledge youth for doing well socially. Yes No If no, skip to # 12.
- 11) What are the social acknowledgements/ activities/ routines called (youth of month, positive referral, stickers, high 5's)? (C2, C3)

#### ***Do you have a team that addresses program-wide discipline? If no, skip to # 19***

- 12) Has the team taught/reviewed the program to staff this year? (B3)  
Yes No
- 13) Is your program-wide team representative of your entire staff? (F3)  
Yes No

- 14) Are you on the team? (F5) Yes No
- 15) How often does the team meet? (F6) \_\_\_\_\_
- 16) Do you attend team meetings consistently? (F5) Yes No
- 17) Who is your team/leader? (F4) \_\_\_\_\_
- 18) Does the team provide staff updates on activities & data summaries?  
(E3) Yes No If yes, how often \_\_\_\_\_
- 19) Do you have an out-of-program liaison in the state or district to  
support you on positive behavior support systems development?  
(G2) Yes No If yes, who? \_\_\_\_\_
- 20) What are your school improvement goals? (F1)
- 21) Does the program budget contain an allocated amount of money for  
building and maintaining school wide behavioral support? (G1)  
Yes No If yes, where does the money come from? \_\_\_\_\_

### **Additional Interviews**

In addition to the administrator interview questions there are questions for Behavior Support Team members, staff and students. *Interviews can be completed during the program tour.* Randomly select students and staff as you walk through the school. Use the interview scoring page to record youth, staff, and team member responses.

### **Staff Interview Questions**

*Interview a minimum of 10 staff*

- 1) 1. Is there a program-wide team that addresses behavioral support in your building? (F2)
- 2) Are you on the team?
- 3) What are the \_\_\_\_\_ (program rules, high 5's, 3 bee's)?  
(B5) (define what the acronym means)
- 4) Have you taught the program rules/behavioral expectations this year?  
(B2)





(2 months ago)	Staff questions --- Interview a minimum of 10 staff						
	<i>What are the pProgram rules? Record the # of rules known.</i>	<i>Have you taught the programl rules/ behav exp. to students this year?</i>	Have you given out any ____ since ____? (2 mos.)	<i>What type of youth problems do/would you refer to the administrator?</i>	<i>What is the procedure for dealing with a stranger/ serious fight?</i>	<i>Is there a team in your program to address program-wide behavior support systems?</i>	Are you on the team? If yes, ask team questions
1		Y N	Y N			Y N	Y N
2		Y N	Y N			Y N	Y N
3		Y N	Y N			Y N	Y N
4		Y N	Y N			Y N	Y N
5		Y N	Y N			Y N	Y N
6		Y N	Y N			Y N	Y N
7		Y N	Y N			Y N	Y N
8		Y N	Y N			Y N	Y N
9		Y N	Y N			Y N	Y N
10		Y N	Y N			Y N	Y N
11		Y N	Y N			Y N	Y N
12		Y N	Y N			Y N	Y N
13		Y N	Y N			Y N	Y N
14		Y N	Y N			Y N	Y N
15		Y N	Y N			Y N	Y N
Total							

	<b>Team member questions</b>		
	<i>Does your team use discipline data to make decisions?</i>	<i>Has your team taught/ reviewed the program w/staff this year?</i>	<i>Who is the team leader/ facilitator?</i>
1	Y    N	Y    N	
2	Y    N	Y    N	
3	Y    N	Y    N	
4	Y    N	Y    N	
5	Y    N	Y    N	
6	Y    N	Y    N	
7	Y    N	Y    N	
8	Y    N	Y    N	
9	Y    N	Y    N	
10	Y    N	Y    N	
11	Y    N	Y    N	
12	Y    N	Y    N	
13	Y    N	Y    N	
14	Y    N	Y    N	
15	Y    N	Y    N	
Total			

<b>Youth questions</b>	
<i>What are the program rules? Record the # of rules known</i>	<i>Have you received a _____ since _____?</i>
1	Y N
2	Y N
3	Y N
4	Y N
5	Y N
6	Y N
7	Y N
8	Y N
9	Y N
10	Y N
11	Y N
12	Y N
13	Y N
14	Y N
15	Y N
Total	

<b>Location</b>	<b>Are rules &amp; expectations posted?</b>	<b>Is the documented crisis plan posted?</b>
Front hall		
Class 1		
Class 2		
Class 3		
Cafeteria		
Library		
Other setting (gym, lab)		
Hall 1		
Hall 2		
Hall 3		

## APPENDIX B

### EFFECTIVE BEHAVIOR SUPPORTS SURVEY

**Effective Behavior Support (EBS)  
Self-Assessment Survey  
Version 2.0**

Data Collection Protocol

- ✓ Conducted annually, preferably in spring.
- ✓ Completed by all staff.
- ✓ Use results to design annual action plan.

## **Effective Behavior Support (EBS) Survey**

### **Assessing and Planning Behavior Support in Schools**

---

#### **Purpose of the Survey**

The EBS Survey is used by school staff for initial and annual assessment of effective behavior support systems in their school. The survey examines the status and need for improvement of four behavior support systems: (a) school-wide discipline systems, (b) non-classroom management systems (e.g., cafeteria, hallway, playground), (c) classroom management systems, and (d) systems for individual students engaging in chronic problem behaviors. Each question in the survey relates to one of the four systems.

Survey results are summarized and used for a variety of purposes including:

1. annual action planning,
2. internal decision making,
3. assessment of change over time,
4. awareness building of staff, and
5. team validation.

The survey summary is used to develop an action plan for implementing and sustaining effective behavioral support systems throughout the school (see “Developing an EBS Annual Action Plan”).

#### **Conducting the EBS Survey**

##### **Who completes the survey?**

Initially, the entire staff in a school completes the EBS Survey. In subsequent years and as an on-going assessment and planning tool, the EBS Survey can be completed in several ways:

- All staff at a staff meeting.
- Individuals from a representative group.
- Team member-led focus group.

### When and how often should the survey be completed?

Since survey results are used for decision making and designing an annual action plan in the area for effective behavior support, most schools have staff complete the survey at the end or the beginning of the school year.

### How is the survey completed?

1. Complete the survey independently.
2. Schedule 20-30 minutes to complete the survey.
3. Base your rating on your individual experiences in the school. If you do not work in classrooms, answer questions that are applicable to you.
4. Mark (i.e., “√” or “X”) on the left side of the page for current status and the right side of the page for the priority level for improvement for each feature that is rated as *partially in place* or *not in place* and rate the degree to which improvements are needed (i.e., *high, medium, low*) (right hand side of survey).

To assess behavior support, first evaluate the status of each system feature (i.e. *in place, partially in place, not in place*) (left hand side of survey). Next, examine each feature:

- a. “What is the current status of this feature (i.e. *in place, partially in place, not in place*)?”
- b. For each feature rated partially in place or not in place, “What is the priority for improvement for this feature (i.e., *high, medium, low*)?”



### **Summarizing the Results from the EBS Survey**

The results from the EBS Survey are used to (a) determine the status of EBS in a school and (b) guide the development of an action plan for improving EBS. The resulting action plan can be developed to focus on any one or combination of the four EBS system areas.

Three basic phases are involved: (a) summarize the results, (b) analyze and prioritize the results, and (c) develop the action plan.

#### **Phase 1: Summarize the results**

The objective of this phase is to produce a display that summarizes the overall response of school staff for each system on (a) status of EBS features and (b) improvement priorities.

Step 1a. Summarize survey results on a blank survey by tallying all individual responses for each of the possible six choices as illustrated in example 1a.

Example 1a.

Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place	<b>School-wide</b> is defined as involving all students, all staff, & all settings.	High	Med	Low
√√√√ √√√√ √	√√√√ √√√	√√√√	1. A small number (e.g. 3-5) of positively & clearly stated student expectations or rules are defined.	√√√√	√√√√	√√√
√√	√√√√ √√	√√√√ √√√√ √√√√	2. Expected student behaviors are taught directly.	√√√√√√ √√√√√√	√√√√	√√√√√√ √

Step 1b. Total the number of responses by all staff for each of the six possible choices. As illustrated in example 1b.

**Example 1b.**

Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place	<b>School-wide</b> is defined as involving all students, all staff, & all settings.	High	Med	Low
√√√√ √√√√ √ 9	√√√√ √√√ 7	√√√√ 4	1. A small number (e.g. 3-5) of positively & clearly stated student expectations or rules are defined.	√√√√ 4	√√√√ 4	√√√ 3
√√ 2	√√√√ √√ 6	√√√√ √√√√ √√√√ 12	2. Expected student behaviors are taught directly.	√√√√√√√√ √√ 10	√√√√ 4	√√√√√ √ 6
√√√√ √√√ 7	√√√√ √√√√ √ 9	√√√ 3	3. Expected student behaviors are rewarded regularly.	√√√√√√ 6	√√√√√ √ 6	
√√√√ √√√ 7	√√√√ √√√√ √√√ 11	√√√ 3	4. Problem behaviors (failure to meet expected student behaviors) are defined clearly.	√√√√√√ 6	√√√√ 4	√√√√ 4
	√√√√ √√√√ 8	√√√√ √√√√ √ 9	5. Consequences for problem behaviors are defined clearly.	√√√√√√√√ √√√ 11	√√√ 3	√√√ 3

Step 1c. For each system area, calculate a total summary by counting the total number of responses for a column (e.g., In place: 9 + 2 + ..) and dividing that number by the total number of responses for the row (e.g., In place + Partial + Not in place).

Example 1c.

Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place	<b>School-wide</b> is defined as involving all students, all staff, & all settings.	High	Med	Low
√√√√ √√√√ √ 9	√√√√ √√√ 7	√√√√ 4	1. A small number (e.g. 3-5) of positively & clearly stated student expectations or rules are defined.	√√√√ 4	√√√√ 4	√√√ 3
√√ 2	√√√√ √√ 6	√√√√ √√√√ √√√√ 12	2. Expected student behaviors are taught directly.	√√√√√√ √√√√ 10	√√√√ 4	√√√√√ 6
√√√√ √√√ 7	√√√√ √√√√ √ 9	√√√ 3	3. Expected student behaviors are rewarded regularly.	√√√√√√ 6	√√√√√√ 6	
√√√√ √√√ 7	√√√√ √√√√ √√√ 11	√√√ 3	4. Problem behaviors (failure to meet expected student behaviors) are defined clearly.	√√√√√√ 6	√√√√ 4	√√√√ 4
	√√√√ √√√√ 8	√√√√ √√√√ √ 9	5. Consequences for problem behaviors are defined clearly.	√√√√√√ √√√√√√ 11	√√√ 3	√√√ 3

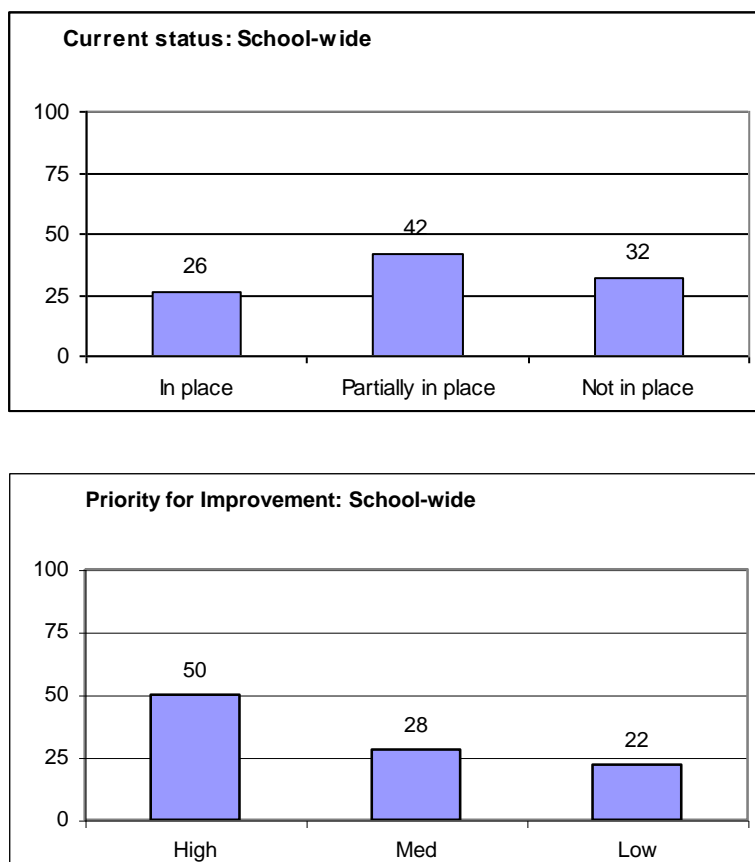
Totals

$$25 + 41 + 31 = 97$$

$$37 + 21 + 16 = 74$$

Step 1d. Create a bar graph showing total item summary percentages for each of the six choices (take total responses for each of six choices and divide by the total number of responses) as illustrated in example 1d. using results from example 1c.. Complete the EBS Survey Summary by graphing the current status and priority for improvement for each of the four system areas. Example 1d. has created the graph for the example data presented and summarized in example 1c.

Example 1d.



Completing Phase 1 provides a general summary for the current status and priority for improvement ratings for each of the four system areas. For further summary and analysis, follow Phase 2 and Phase 3 activities.

## **Phase 2: Analyze and Prioritize the Results**

The objective of this phase is for teams to narrow the focus of Action Plan activities. Teams also may want to include other data or information (e.g., office discipline referrals, behavior incident reports, attendance) to refine their decisions. Use the EBS Survey Summary to guide and document your analysis. In general, the following guidelines should be considered:

- Step 1. Using the EBS Survey Summary Graph results, rate the overall perspective of EBS implementation by circling High, Med., or Low for each of the four system areas.
- Step 2. Using the EBS Survey Tally pages, list the three major strengths in each of the four system areas.
- Step 3. Using the EBS Survey Tally pages, list the three major areas in need of development.
- Step 4. For each system, circle one priority area for focusing development activities.
- Step 5. Circle or define the activities for this/next year's focus to support the area selected for development
- Step 6. Specify system(s) to sustain (S) & develop (D).

## **Phase 3: Use the EBS Survey Summary Information to Develop the EBS Annual Action Plan**

The objective of this phase to develop an action plan for meeting the school improvement goal in the area of school safety. Multiple data sources will be integrated when developing the action plan. The EBS Survey Summary page summarizes the EBS Survey information and will be a useful tool when developing the EBS Annual Action Plan. The EBS Annual Action Plan process can be obtained by contacting the first author of this document.

**Effective Behavior Support (EBS) Survey**  
**Assessing and Planning Behavior Support in Schools**

Name of school \_\_\_\_\_ Date \_\_\_\_\_

District \_\_\_\_\_ State \_\_\_\_\_

Person Completing the Survey:

- ☐ Administrator
                     ☐ Special Educator
                     ☐ Parent/Family member  
☐ General Educator
                     ☐ Counselor
                     ☐ School Psychologist  
☐ Education/Teacher Assistant
  ☐ Community member
  ☐ Other \_\_\_\_\_

1. Complete the survey independently.
2. Schedule 20-30 minutes to complete the survey.
3. Base your rating on your individual experiences in the school. If you do not work in classrooms, answer questions that are applicable to you.

To assess behavior support, first evaluate the status of each system feature (i.e. *in place, partially in place, not in place*) (left hand side of survey). Next, examine each feature:

- a. “What is the current status of this feature (i.e. *in place, partially in place, not in place*)?”
- b. For those features rated as partially in place or not in place, “What is the priority for improvement for this feature (i.e., *high, medium, low*)?”

4. Return your completed survey to \_\_\_\_\_ by \_\_\_\_\_

### SCHOOL-WIDE SYSTEMS

Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place	<b>School-wide</b> is defined as involving all students, all staff, & all settings.	High	Med	Low
			1. A small number (e.g. 3-5) of positively & clearly stated student expectations or rules are defined.			
			2. Expected student behaviors are taught directly.			
			3. Expected student behaviors are rewarded regularly.			
			4. Problem behaviors (failure to meet expected student behaviors) are defined clearly.			
			5. Consequences for problem behaviors are defined clearly.			
			6. Distinctions between office v. classroom managed problem behaviors are clear.			
			7. Options exist to allow classroom instruction to continue when problem behavior occurs.			
			8. Procedures are in place to address emergency/dangerous situations.			
			9. A team exists for behavior support planning & problem solving.			
			10. School administrator is an active participant on the behavior support team.			
			11. Data on problem behavior patterns are collected and summarized within an on-going system.			
			12. Patterns of student problem behavior are reported to teams and faculty for active decision-making on a regular basis (e.g. monthly).			
			13. School has formal strategies for informing families about expected student behaviors at school.			
			14. Booster training activities for students are developed, modified, & conducted based on school data.			

Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place	<b>School-wide</b> is defined as involving all students, all staff, & all settings.	High	Med	Low
			15. School-wide behavior support team has a budget for (a) teaching students, (b) on-going rewards, and (c) annual staff planning.			
			16. All staff are involved directly and/or indirectly in school-wide interventions.			
			17. The school team has access to on-going training and support from district personnel.			
			18. The school is required by the district to report on the social climate, discipline level or student behavior annually.			

Name of School \_\_\_\_\_ Date \_\_\_\_\_



### NONCLASSROOM SETTING SYSTEMS

Current Status			Feature	Priority for		
In Place	Partial in Place	Not in Place	<b>Non-classroom settings</b> are defined as particular times or places where supervision is emphasized (e.g., hallways, cafeteria, playground, bus).	High	Med	Low
			1. School-wide expected student behaviors apply to non-classroom settings.			
			2. School-wide expected student behaviors are taught in non-classroom settings.			
			3. Supervisors actively supervise (move, scan, & interact) students in non-classroom settings.			
			4. Rewards exist for meeting expected student behaviors in non-classroom settings.			
			5. Physical/architectural features are modified to limit (a) unsupervised settings, (b) unclear traffic patterns, and (c) inappropriate access to & exit from school grounds.			
			6. Scheduling of student movement ensures appropriate numbers of students in non-classroom spaces.			
			7. Staff receives regular opportunities for developing and improving active supervision skills.			
			8. Status of student behavior and management practices are evaluated quarterly from data.			
			9. All staff are involved directly or indirectly in management of non-classroom settings.			

Name of School \_\_\_\_\_ Date \_\_\_\_\_

### CLASSROOM SYSTEMS

Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place	<b>Classroom settings</b> are defined as instructional settings in which teacher(s) supervise & teach groups of students.	High	Med	Low
			1. Expected student behavior & routines in classrooms are stated positively & defined clearly.			
			2. Problem behaviors are defined clearly.			
			3. Expected student behavior & routines in classrooms are taught directly.			
			4. Expected student behaviors are acknowledged regularly (positively reinforced) (>4 positives to 1 negative).			
			5. Problem behaviors receive consistent consequences.			
			6. Procedures for expected & problem behaviors are consistent with school-wide procedures.			
			7. Classroom-based options exist to allow classroom instruction to continue when problem behavior occurs.			
			8. Instruction & curriculum materials are matched to student ability (math, reading, language).			
			9. Students experience high rates of academic success ( $\geq 75\%$ correct).			
			10. Teachers have regular opportunities for access to assistance & recommendations (observation, instruction, & coaching).			
			11. Transitions between instructional & non-instructional activities are efficient & orderly.			

Name of School \_\_\_\_\_ Date \_\_\_\_\_

### INDIVIDUAL STUDENT SYSTEMS

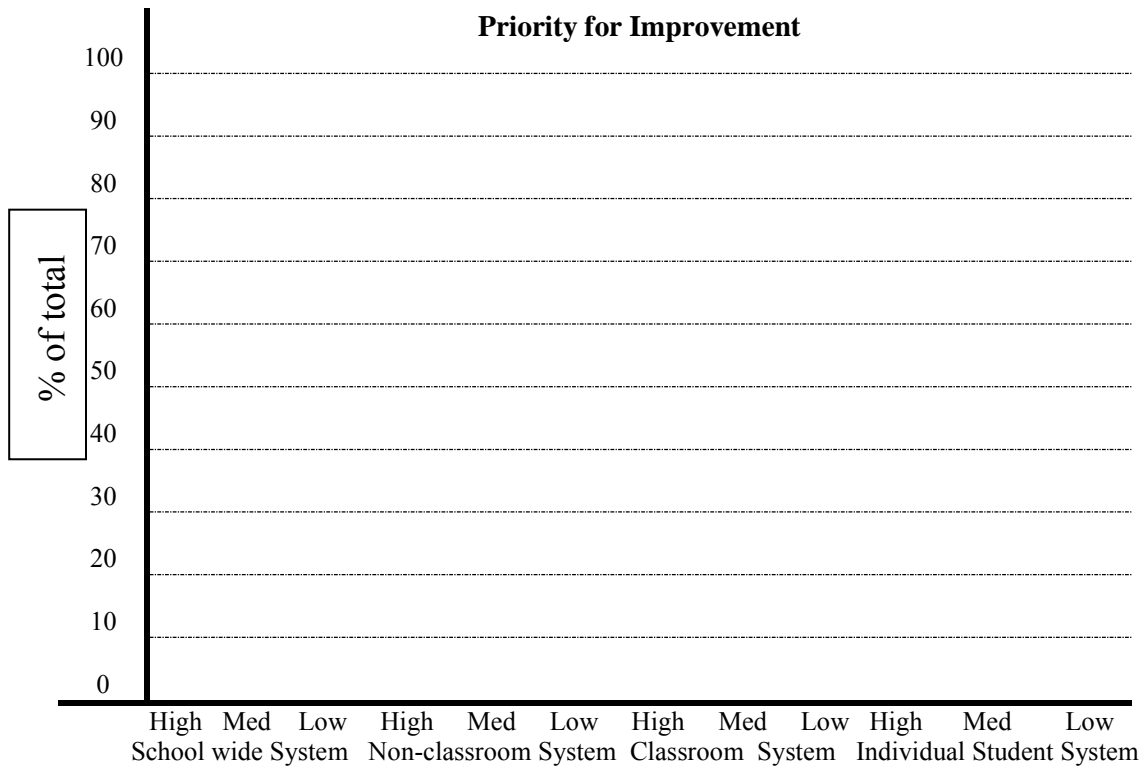
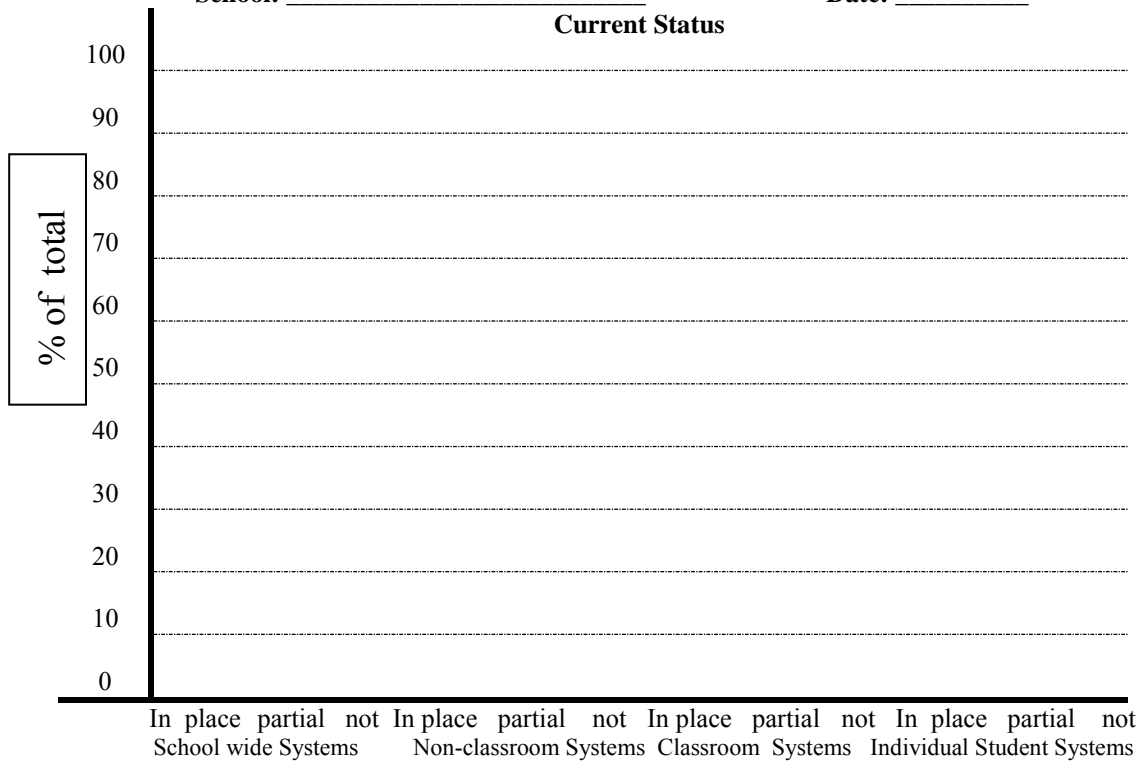
Current Status			Feature	Priority for Improvement		
In Place	Partial in Place	Not in Place	<b>Individual student systems</b> are defined as specific supports for students who engage in chronic problem behaviors (1%-7% of enrollment)	High	Med	Low
			1. Assessments are conducted regularly to identify students with chronic problem behaviors.			
			2. A simple process exists for teachers to request assistance.			
			3. A behavior support team responds promptly (within 2 working days) to students who present chronic problem behaviors.			
			4. Behavioral support team includes an individual skilled at conducting functional behavioral assessment.			
			5. Local resources are used to conduct functional assessment-based behavior support planning (~10 hrs/week/student).			
			6. Significant family &/or community members are involved when appropriate & possible.			
			7. School includes formal opportunities for families to receive training on behavioral support/positive parenting strategies.			
			8. Behavior is monitored & feedback provided regularly to the behavior support team & relevant staff.			

Name of School \_\_\_\_\_ Date \_\_\_\_\_

### EBS Survey Summary Graph

School: \_\_\_\_\_

Date: \_\_\_\_\_



Use the EBS Survey Tally page and the EBS Survey Summary Graph to develop an accurate summary & determine initial focus area priorities

	School-wide	Non-classroom	Classroom	Ind. Student
1. Use <i>EBS Survey Summary Graph</i> to rate overall perspective of EBS implementation & circle High, Med. or Low	High Med Low	High Med Low	High Med Low	High Med Low
2. Using <i>EBS Survey Tally Pages</i> , list three major strengths	a. b. c.	a. b. c.	a. b. c.	a. b. c.
3. Using the EBS Survey Tally pages, list three major areas in need of development. 4. For each system, circle one priority area for focusing development activities	a b. c.	a. b c.	For each system area, follow the steps as outlined below	<b><u>Overall Perception</u></b>
5. Circle or define activities for this/next year's focus to support area selected for development	a. Organize a team b. Define/teach school rules c. Define consequence systems for appropriate & inappropriate behavior d. Define a measurement system linked to school improvement goal e. Establish communication cycles with other school teams f. Develop implementation plan	a. Define/teach routines b. Supervisor booster training & feedback sessions c. Data management d. Maintain team & communication cycle with other school teams e. Develop implementation plan	a. Define/teach routines/ link with school wide rules b. Classroom staff boosters & feedback sessions for creating effective strategies/materials c. Data management d. Maintain team & communication cycle with other school teams e. Develop implementation plan	a. Process for referral & support plan design, implementation & monitoring b. Plan to develop & use FBA to support skills c. Data management d. Maintain team & communication cycle with other school teams e. Develop implementation plan
6. Specify system(s) to: sustain (S) & develop (D).				
7. Use the EBS Annual Action Planning form for determining management, design & implementation activities in the selected focus areas.				

## APPENDIX C

### DAILY INTERACTION SHEET



## APPENDIX D

### YOUTH OUTCOME QUESTIONNAIRE



# Youth Outcome Questionnaire-Self Report (Y-OQ -SR 2.0)

Name: \_\_\_\_\_ ID#: \_\_\_\_\_ Today's Date: \_\_\_\_\_

Date of Birth: \_\_\_\_\_ Sex: MF Parent/Guardian: \_\_\_\_\_

Purpose: The Y-OQ -SR 2.0 is designed to describe a wide range of troublesome situations, behaviors, and moods that are common to adolescents. You may discover that some of the items do not apply to your current situation. If so, please do not leave these items blank but check the "Never or Almost Never" category. When you begin to complete the Y-OQ -SR 2.0 you will see that you can easily make yourself look as healthy or unhealthy as you wish. Please do not do that. If you are as accurate as possible it is more likely that you will be able to receive the help that you are seeking.

## DIRECTIONS:

- Read each statement carefully.
- Decide how true this statement is during the past 7 days.
- Check the box that most accurately describes the past week.
- Check only one answer for each statement and erase unwanted marks clearly.

		Never or Almost Never	Rarely	Sometimes	Frequently	Almost Always or Always
1.	I want to be alone more than others my same age.					
2.	I have headaches or feel dizzy.					
3.	I don't participate in activities that used to be fun.					
4.	I argue or speak rudely to others.					
5.	I have more fears than others my same age.					
6.	I cut classes or skip school altogether.					
7.	I cooperate with rules and expectations of adults.					
8.	I have a hard time finishing my assignments or I do them carelessly.					
9.	I complain about things that are unfair.					
10.	I have trouble with constipation or diarrhea.					
11.	I have physical fights (hitting, kicking, biting, or scratching) with my family others my age.					
12.	I worry and can't get thoughts out of my mind.					

13.	I steal or lie.					
14.	I have a hard time sitting still (or I have too much energy)					
15.	I feel anxious or nervous					
16.	I talk with others in a friendly way					
17.	I am tense and easily startled (jumpy).					
18.	I have trouble with wetting or messing my pants or bed.					
19.	I physically fight with adults.					
20.	I see, hear, or believe in things that are not real.					
21.	I have hurt myself on purpose (for example, cut, scratched, or attempted suicide).					
22.	I use alcohol or drugs.					
23.	I am disorganized (or I can't seem to get organized)					
24.	I enjoy my relationships with family and friends.					
25.	I am sad or unhappy.					
26.	I have pain or weakness in muscles or joints.					
27.	I have a hard time trusting friends, family members, or other adults.					
28.	I think that others are trying to hurt me even when they are not.					
29.	I have threatened to, or have run away from home.					
30.	My emotions are strong and change quickly.					
31.	I break rules, laws, or don't meet others' expectations on purpose.					
32.	I am happy with myself.					
33.	I pout, cry, or feel sorry for myself more than others my age.					
34.	I withdraw from my family and friends.					
35.	My stomach hurts or I feel sick more than others my same age.					

36.	I don't have friends or I don't keep friends very long.					
37.	My parents or guardians don't approve of my friends.					
38.	I think I can hear other people's thoughts or that they can hear mine.					
39.	I am involved in sexual behavior that my friends or family would not approve of.					
40.	I have a hard time waiting for my turn in activities or conversations.					
41.	I think about suicide or feel I would be better off dead.					
42.	I have nightmares, trouble getting to sleep, oversleeping, or waking up too early.					
43.	I complain about or question rules, expectations, or responsibilities.					
44.	I have times of unusual happiness or excessive energy.					
45.	I'm generally okay with frustration or boredom.					
46.	I am afraid I am going crazy.					
47.	I feel guilty when I do something wrong.					
48.	I demand a lot from others or I am pushy.					
49.	I feel irritated.					
50.	I throw-up or feel sick to my stomach more than others my age.					
51.	I get angry enough to threaten others.					
52.	I get into trouble when I'm bored.					
53.	I'm hopeful and positive.					
54.	Muscles in my face, arms, or body twitch or jerk.					
55.	I destroy property on purpose.					
56.	I have a hard time concentrating, thinking clearly, or sticking to tasks.					

57.	I get down on myself and blame myself for things that go wrong					
58.	I have lost a lot of weight without being sick.					
59.	I act without thinking and don't worry about what will happen.					
60.	I am calm.					
61.	I don't forgive myself for things I've done wrong.					
62.	I don't have much energy.					
63.	I feel like I don't have any friends or that no one likes me.					
64.	I get frustrated or upset easily, and give up.					

	<b>ID</b>	<b>S</b>	<b>IR</b>	<b>SP</b>	<b>BD</b>	<b>CI</b>
Subscale Totals:						
Total =						

Gary M. Burlingame Ph.D. and Michael J. Lambert, Ph.D.

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## APPENDIX E

### PBS ACCEPTABILITY QUESTIONNAIRE

Strongly disagree                      Strongly agree

1                      2                      3                      4                      5

7) I would recommend the implementation of Positive Behavior Support for other programs similar to ARTEC.

8) What did you like the most about implementing Positive Behavior Support at ARTEC?

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